

Review Article

Domestic Violence Against Men— Prevalence and Risk Factors

Verena Kolbe, Andreas Büttner

Summary

Background: According to the World Health Organization (WHO), intimate partner violence is among the major risks to women's health around the world. Men, too, can be victims of domestic violence; like female victims, they tend to present initially with their injuries to a family physician or an emergency room. Domestic violence against men is thus a relevant issue for physicians of all specialties.

Methods: This review is based on publications retrieved by a comprehensive, selective search in the PubMed database and with the Google Scholar search service, as well as on a retrospective analysis of data on the injured persons, the aggressors, and the nature of the violence that was experienced and the injuries that were sustained.

Results: The studies identified by the search yielded prevalence rates of 3.4% to 20.3% for domestic physical violence against men. Most of the affected men had been violent toward their partners themselves. 10.6–40% of them reported having been abused or maltreated as children. Alcohol abuse, jealousy, mental illness, physical impairment, and short relationship duration are all associated with a higher risk of being a victim of domestic violence. The reported consequences of violence include mostly minor physical injuries, impaired physical health, mental health problems such as anxiety or a disruptive disorder, and increased consumption of alcohol and/or illegal drugs.

Conclusion: The prevalence of violence against men and the risk factors for it have been little studied to date. It would be desirable for preventive measures to be further developed and for special help to be made available to the affected men.

Cite this as:

Kolbe V, Büttner A: Domestic violence against men—prevalence and risk factors. *Dtsch Arztebl Int* 2020; 117: 534–41.
DOI: 10.3238/arztebl.2020.0534

Intimate partner violence is one of the main health risks for women, according to the World Health Organization (WHO) (1). According to the definition of the convention on preventing and combating violence against women and domestic violence (Istanbul Convention), which came into force on 1 August 2014, committing violence against women includes all acts of physical, sexual, psychological, and economic harm or suffering within the family, the household, or between current or former partners (2).

According to analyses by the German Federal Criminal Police Office, nationwide in 2018, 114 393 women and 26 362 men experienced intimate partner violence, but nothing had been documented about the severity of possible injuries (3). In Mecklenburg–Western Pomerania, the police crime statistics indicate that in the same year, 4317 persons were victims of domestic violence (3978 in 2017), but this number had not been differentiated by sex (4). It should be borne in mind that these statistical data only document reported crimes.

A representative survey of the EU's Fundamental Rights Agency (FRA) into the extent of sexual and domestic violence included 42 000 women from 28 EU member states and found that one in four or five women has been subjected to physical intimate partner violence since her 15th year of life. For Germany, a moderate to high prevalence of violence was noted compared with other European countries (5).

A 2004 pilot study investigating the general experiences of violence among men from childhood into adulthood showed after 266 quantitative interviews had been analyzed that one in four men had experienced physical violence at the hands of their female partners at least once (6).

The German Health Interview and Examination Survey for Adults (DEGS1) found that 1.2% of women and 0.9% of men who participated in the survey had been the victims of physical partner violence in the preceding 12 months, although the study method is not uncontroversial (7, 8). A Swiss study found that 2.9% of the 1503 participants had been victims of physical partner violence (9).

German-language medical or forensic technical contributions regarding affected men currently barely exist; consequently we will evaluate the international literature and our own data collection in order to provide a fundamental review of the subject.

Institute of Forensic Medicine, University Medical Center Rostock: Dr. med. Verena Kolbe, Prof. Dr. med. Andreas Büttner

cme plus +

This article has been certified by the North Rhine Academy for Continuing Medical Education. Participation in the CME certification program is possible only over the internet: cme.aerzteblatt.de.

The deadline for participation is 2 August 2021.

The consequences of physical violence

Domestic violence against women has been comprehensively researched and acknowledged as a complex event, with the aim of gaining control and power over one's partner (5). In addition to—potentially fatal—physical injuries, the harms caused may be (psycho)somatic and psychological in nature or they may consist of behaviors that pose a risk to health (10, 11). 70–80% of children who witness violence against a parent require special help for diverse behavioral problems or emotional disorders (12, 13).

It is well known that women affected by violence have greater problems in securing and maintaining gainful employment (14). According to estimates from the US Centers of Disease Control and Prevention (CDC), affected persons in the US incur a loss of 8 million paid working days as well as 5.6 million working days in the home or family (15). Such unfitness for work leads to higher morbidity and therefore increased use of healthcare services (16).

Although this article focuses on men affected by domestic violence we wish to point out that for women/girls affected by violence—particularly sexual violence—established recommendations for action exist (17–20).

Forensic and medical/clinical relevance

In the first place, physical intimate partner violence in the form of assault falls among the so-called criminal offences prosecuted only on application by the victim, although the prosecution has the option of agreeing that a criminal prosecution is in the public interest. In such cases, the investigating authorities can commission a medical expert to examine a victim of violence (21).

Since female victims of partner violence tend to be reticent in their reporting behavior—study results show that only 8.8% of women report this to the police (22)—we wish to emphasize the importance of the clinical-forensic examination. Independently of potential criminal proceedings, victims are given easy access to having any injuries sustained documented professionally (after surgical care, where required) and in a form that can be used in court, as well as having evidence secured. In particular, injured parties who do initially not want to file a police report depend on qualified and court-safe documentation of findings, in order to enable a legal work-up of their case at a later date (23, 24).

Victims often initially approach their general practitioners or doctors in emergency departments in hospitals (25, 26). It should therefore be among every doctor's competencies to identify indications of violence, tackle these, and document them accordingly.

Methods

We conducted a selective literature search in the database PubMed and by using the search engine Google Scholar, using the following search terms: “Häusliche Gewalt gegen Männer”, “Partnerschaftsgewalt”, “Männergewalt”, “domestic violence against men”, and

“violence in intimate partner relationships”. We restricted our search to the primary scientific literature published between 1990 and 2019.

When scanning abstracts we considered only articles that had defined the use of violence according to the Istanbul Convention. Where inclusion and exclusion criteria could not be determined on the basis of the title and abstract, we analyzed the full text. Only articles containing prevalence rates of medically relevant forms of domestic violence as reported by the injured parties or the perpetrators were considered eligible for inclusion. After scanning the articles and selection according to inclusion and exclusion criteria, we included 17 articles in the present review.

In order to compare the published results with our own data, we retrospectively analyzed the study data of the outpatient department for victims of violence at the Institute for Forensic Medicine at Rostock University Medical Center over a period of five years (2013–2018). The data collection was generated from the study documentation and evaluated in anonymized form by using Microsoft Excel 2003 software.

Results

Study characteristics

In the included studies we also investigated in addition to the three relevant forms of violence—physical, sexual, and psychological violence—associations with alcohol consumption (27–30) and substance misuse (27, 31), psychiatric disorders (23, 33), sexual orientation (34), and disabilities (33). The sample size of the studies included data from 54 men surveyed (35) and from 220 073 patient files (36). The experiences of violence were collected in six studies by using the Conflict Tactics Scale (CTS, mCTS, or CTS-2) (27, 29, 32, 37–39). *Table 1* includes further study characteristics.

Prevalence rates and representative data

The included studies reported prevalence rates between 3.4% and 20.3% for physical violence (27, 32), between 7.3% and 37% for psychological violence (39, 40), and between 0.2% and 7% for sexual violence (38, e1) against physically and mentally healthy men.

For men with psychiatric disorders or disabilities, prevalence rates were clearly higher: 31.8% for physical violence and 42.9% for psychological violence (31), and between 4.1% and 8.8% for sexual violence (31, 33).

Four studies investigated whether the men affected had committed violent acts themselves (29, 30, 35, 39). Of note: most of the affected men had themselves been violent against their partners. Muellemann and colleagues reported that more than half of those affected had already spent time in prison because of domestic violence (35). This is consistent with the results of a study reported by Swan et al., which showed that 92% of women who committed domestic violence had previously experienced violence at the hands of their partners (37).

TABLE 1

Characteristics of studies of domestic violence against men

Reference & study design	Sample size	Associations under study	Prevalence rates
Thureau et al. (25) Retrospective data analysis	707 French victims of domestic violence, of which 81 were men and 626 were women	<ul style="list-style-type: none"> - Marital status - Timing of the incident - Type of injuries - Psychological impact - Duration of unfitness for work 	85% of subjects had minor skin injuries; 5% were seriously injured; 91% of men were unfit to work for <3 days; 49% of men were victims on repeated occasions; 10% of men had been strangled, weapons were used against 33% ; 70% of the men had been psychologically impaired
Carbone-López et al. (27) Cross-sectional study	5867 men, 5991 women from the US	<ul style="list-style-type: none"> - Age - Ethnicity - Marital status - Gainful employment/income - Health behaviors - Drinking behavior/substance use 	3.4% of men reported having experiences interpersonal violence; 1.6% of men reported having been the victim of systematic abuse
Carmo et al. (28) Retrospective cohort study	353 Portuguese men	<ul style="list-style-type: none"> - Age - Marital status - Education/employment - Drinking behavior/substance use - Previous experience of violence 	11.5% of persons undergoing forensic medical examination were men who were victims of intimate partner violence; 16.2% of victims had already been abused in childhood; 9.3% reported alcohol misuse; 12.1% were mentally ill; in most cases the men had been scratched (18.9%) and had abrasions to the upper half of the body
Schafer et al. (29) Cross-sectional study	1599 US heterosexual couples	<ul style="list-style-type: none"> - Drinking habits - Ethnicity 	In up to 21.48% of partnerships, violence had been committed mutually; exclusively by the female partner in up to 18.21%
Wang et al. (30) Cross-sectional study	Survey of 2661 of Chinese people	<ul style="list-style-type: none"> - Sexual jealousy - Patriarchal values/dependencies - Lifestyle/social network 	Altogether 4% of men reported having been hit by their female partners; 2% of couples had hit each other
Khalifeh et al. (31) Cross-sectional study	170 male, 133 female psychiatric patients in England	<ul style="list-style-type: none"> - Chronic mental disorders - Age - Education/employment - Living conditions/ household members - Substance misuse 	42.9% of male patients reported having experienced emotional violence; 31.8% of men had experienced physical violence; 4.1% of men had experienced sexual violence
Affi et al. (32) Cross-sectional study	216 men, 190 women from the US	<ul style="list-style-type: none"> - Child abuse experienced - Psychiatric disorders/ suicide attempts - Age/sex - Education - Marital status - Sexual orientation 	20.3% of the men in the survey were victims of domestic violence within their current relationship
Mitra et al. (33) Cross-sectional study	Telephone surveys of 1 138 734 US Americans	<ul style="list-style-type: none"> - Physical, mental, or emotional problems - Age - Ethnicity - Education/employment - Marital status 	8.8% of disabled men in the survey had experienced sexual violence
Stults et al. (34) Cross-sectional study	528 US American homosexual or bisexual men	<ul style="list-style-type: none"> - Unprotected sexual intercourse - Ethnicity - Age - Socioeconomic status 	44.3% of men had experienced a form of intimate partner violence
Muelleman et al. (35) Retrospective case-control study	54 cases of US-American male victims, 45 control cases	<ul style="list-style-type: none"> - Perpetrators themselves - Age - Ethnicity 	51% of victims had already been arrested themselves for domestic violence (versus 22% in the control group)
Dienye et al. (36) Retrospective data analysis	220 073 patient files from a Nigerian hospital, including 5 male victims	<ul style="list-style-type: none"> - Age - Marital status - Socioeconomic status - Injury pattern 	0.0023% of patients were male victims of domestic violence
Swan et al. (37) Cross-sectional study	412 US women, who had previously committed violent acts against their partners	<ul style="list-style-type: none"> - Ethnicity - Marital status - Education/income 	92% of violent women reported having experienced violence at the hands of their partners
Tjaden et al. (38) Cross-sectional study	8000 US men and women each	<ul style="list-style-type: none"> - Marital status - Frequency and duration of violent incidents - Sequelae of violence 	0.2% of men in the survey had been forced to have sexual intercourse; 7% of men had been victims of physical partner violence; 0.5% of men had been stalked by their female partners

Reference & study design	Sample size	Associations under study	Prevalence rates
Lövestad et al. (39) Cross-sectional study	173 men, 251 women in Sweden	– Age – Marital status – Length of relationship	11% each of those surveyed had experienced physical violence in the preceding year or even earlier; 37% of men reported controlling behavior by their partner; 64% of affected men had committed violence against their female partners
Umubyeyi et al. (40) Cross-sectional study	440 men, 477 women in Rwanda	– Age – Number of children – Education/income/standard of living – Social support	4.3% of men had experienced physical violence in the preceding year; 7.3% had experienced psychological violence and 1.5% sexual violence
Mechem et al. (e1) Cross-sectional study	866 US men	– Ethnicity – Marital status – Insurance status	12.6% of patients had become victims of domestic violence in the preceding year, which mostly had been executed by hitting, grabbing, and shoving (60.6%), 7% had been forced to have sexual intercourse
Breiding (e3) Cross-sectional study	12 727 interviews	– Age	1.7% of men in the US reported having been raped in their lifetimes; 23.4% had experienced other forms of sexual violence, 5.7% had experienced stalking

According to the evaluated forensic medical studies, 53.8% (28) and 85% (25) of men and 64% of women presented with mostly minor injuries, such as skin abrasions (25, 27). For both sexes, serious injuries, such as bone fractures, were found in only 5% (25). *Table 1* summarizes further prevalence rates.

Risk factors

Between 10.6% and 40% of affected men themselves had experienced abuse or cruelty in childhood (32, 36). Alcohol misuse, jealousy, mental disorders, disabilities, and short relationship duration were identified as further risk factors (30–33, 39). The described consequences of violence included in addition to physical injuries (25) a 2.5-fold reduction in wellbeing (odds ratio [OR]:1.95) as well as (in 24.2% of cases) psychiatric sequelae, such as anxiety or other mood disorders (13.6% and 8%), disruptive disorders (11.2%), and raised alcohol consumption or substance misuse (7.1%) (27, 32). Further aspects are listed in *Table 1*.

In our own data collection, a total of 867 persons in the outpatient department for victims of violence were examined over the study period, of which 455 were adults (52.5%). Of these, 190 were men, of whom 16 reported being victims of intimate partner violence. The study included all examined men who presented to the outpatient department for victims of violence in the absence of an official order according to § 81 of the German code of criminal procedure. None of those examined refused to participate in the data collection. Of note is the number of male victims in 2018, which in that study year accounted for 5.2% of total examinations and 10.3% of examined adults. *Table 2* summarizes the main results from the data survey.

The male victims of intimate partner violence who were examined were exclusively middle aged or older. Eight men were aged between 31 and 50, eight were older than 50. Altogether eight of the men were

local, four were from the neighboring rural district of Rostock. Only four men presented from the further away cities of Schwerin and Wismar or the rural district of Ludwigslust-Parchim.

All of the men in the study were living in heterosexual relationships. Six reported that their partners had mental disorders, in equal proportions alcohol dependency, depression, and paranoid schizophrenia. Of these men, two reported being alcohol dependent or having borderline personality disorder themselves.

The violence was committed mainly by wives, in four cases by life partners. In two cases violence was committed by former partners; in these cases contact had remained close because the couple had children together. It should not be discounted that violence can be committed on a mutual basis (35): in two cases the wives of the injured men also presented to the outpatient department for victims of violence.

Participants named as triggers mainly accusations of unfaithfulness, financial worries, or the already mentioned underlying mental disorders. The reported frequency of incidents was “once” and “repeatedly in the past three years.”

The men mainly reported having been struck openhandedly and scratched. In most cases, however, combinations of different methods of blunt violence were applied (*Table 2*); two men reported being struck with items such as a barbell/dumbbell and shoehorn. The men under study showed the effects of low grade to higher grade intensive blunt violence. The main injuries seen were scratch-like skin defects, hematomas, erythema, but no patterned injuries. Penetrating trauma, compression of the neck, or sexual violence were not reported, but it should be borne in mind that the study population was small. In two cases, inpatient admission was required; four men received outpatient medical treatment. We present two example findings from selected cases.

TABLE 2

Retrospective evaluation of examinations undertaken between January 2013 and December 2018 in the Rostock outpatient department for victims of domestic violence (documentation of injuries in 16 men after intimate partner violence)

Examinations in total		Victims of domestic violence		Results			
Year	Number	Women	Men	Man's age	Female perpetrator as reported	Type of violence applied	Documented injuries
2013	73	14	1	36	Life partner	Punches	Erythema
2014	107	24	1	64	Wife	Punches	Hematomas
2015	119	17	3	35	Life partner	Blows, scratches Blows, pushing	Erythema Aural hematoma, vitreous hemorrhage, hematomas
				68	Wife		
				50	Wife	Struck with barbell/dumbbell	Hematomas
2016	190	18	–				
2017	186	34	1	42	Wife	Punches	Monocle hematoma, abrasions
2018	203	32	10	31	Former partner	Slaps in the face, scratching	Abrasions, erythema Hematomas, abrasions Hematomas, abrasions Hematomas, erythema, abrasions Hematomas, abrasions Bite wounds, hematomas, abrasions Bite wounds, abrasions, erythema
				53	Wife	Scratching, blows	
				68	Wife	Blows	
				64	Life partner	Struck with shoehorn	
				54	Wife	Blows, scratching	
				68	Wife	Blows, kicks, bites	
				31	Life partner	Bites in rib areas, kicks, shoving, kick in the genitals	
				65	Wife	Open handed slap	
38	Former partner	Punches, scalding	Abrasions, hematomas Erythema, scalds				
39	Wife	Grabbing the genitals hard	Hematomas, abrasions				

Case 1

A 38-year-old man reported how after an initially verbal argument with his former partner, she had struck him with her fist and threatened him with a knife. Subsequently she had splashed him with hot water from a kettle (Figure 1). He then shoved her. Both parties reported contacting the police in parallel. The man reported two earlier incidences of domestic violence against him by his partner.

Case 2

A 35-year-old man reported having got into an argument with his long-term life partner regarding him using his mobile phone. When he wanted to leave the flat, the argument escalated. She knocked the mobile out of his hands, struck his back with her fists, and scratched him (Figure 2). He reported several prior incidents of a similar nature; she often “lost it.”

Discussion

Intimate partner violence continues to be considered the most common form of violence against women and can result in serious injuries. In Germany in 2018, a total of 324 women and 97 men fell victim to attempted or completed killing at the hands of their (former) partners (3). In Western societies it seems that the ongoing move towards equality of the sexes is associated with an increase in domestic violence against men (3, e2).

The DEGS1 study, which we mentioned earlier, was criticized—among other reasons—because differentiated study instruments had been applied inexpertly and critical discussions relating to the subject had been disregarded (8). Similarly, we cannot unequivocally say whether the studies presented here included details on context, personal dynamics, or the sociocultural background of the subjects, especially tendencies to denial or taboo.

Most men in our own survey were married to the female perpetrators or had lived with the women for several years. This contradicts the results of Lövestadt and Krantz, who found that if a relationship had existed for less than three years, the risk of becoming a victim of domestic violence was higher (OR: 4.85; 95% confidence interval: [1.94; 12]) (39).

According to the Federal Criminal Police Office, the age group of 30- to 39-year-old men was most commonly affected by domestic violence (3). Even though older men were overrepresented in our own survey, other studies indicate that younger men particularly at risk (e1, e3).

In Mecklenburg–Western Pomerania, a recent study of unreported crimes found that only 3% of cases of intimate partner violence are reported to the police, but the study did not differentiate by sex (e4). The unreported numbers of women and men who are victims of domestic violence is likely to be much higher in view of such a low willingness to make a



Figure 1:
Case 1, patchy scald injuries on the front of the right shoulder



Figure 2:
Case 2, streaky skin hemorrhages on the right acromion

report (28). Many theories exist of why men in particular may hesitate to report domestic violence. In addition to their own feelings of shame, one reason may be fear that they will not be believed and worry that they will be prohibited from contact with their children. Furthermore, there are the reasons known from female victims of domestic violence: the hope that their partner will change and the desire for an intact family (6).

The well known three phases in the cycle of violence—the tension-building phase, acute or crisis phase, and calm or honeymoon phase—is rarely broken without external intervention; rather, it is likely to gain in intensity (e5). Whether this model is also generalizable to men affected by intimate partner violence should be investigated in future studies.

Our survey of cases in Rostock shows that the range of injuries is similar to that seen in other forensic studies: Todt et al. evaluated studies commissioned by the authorities of 199 female and 17 male victims of domestic violence and described as the most common injuries hematomas, skin abrasions, and erythema, which occurred in greater numbers on the upper limb, head, and trunk of the injured party (e6). Walter and colleagues found that 67% of affected men had not contracted any injuries, but 21% reported hematomas and contusions, 7% reported pain, and 5% reported head injuries (6). These injuries are consistent with those in our own survey as well as those reported in international forensic medical studies (27, 28).

A nationwide prevalence study found that 64% of women who were victims of intimate partner violence reported injuries, and 56–80% reported mental sequelae (e7). Similar effects were also found for men who were victims of intimate partner violence (27,

32), although mental stress or the presence of Munchausen syndrome cannot be studied in a forensic medical setting.

It is already scientifically confirmed that clinical-forensic studies are needed (e8). Data from the local counseling and support network CORA confirm that in 2018, 400 women and 39 men reported having received counseling in specialist advice centers for sexual violence, and 2053 women and 346 men reported having received counseling in intervention centers for domestic violence and stalking (e9).

Conclusion

Dealing with this stigmatized topic in an open and supportive way is a mandatory prerequisite to identifying victims of domestic violence in routine clinical practice. To this end, more training measures for physicians should be made available in order to raise awareness of the subject. Hospital staff in particular have a key role in setting the course, and should thus be supported by targeted training measures (23).

Doctors from all specialties form an interface between medical care, documentation of findings, and the wider support system. Numerous recommendations exist for conducting a forensic-medical examination and relevant documentation of findings in victims of violence; on the basis of these the documentation of injuries of men who are victims of domestic violence in medical practice should not pose any problem (17–19, e10).

Conflict of interest statement

The authors declare that no conflict of interest exists.

Manuscript received on 17 December 2019, revised version accepted on 8 May 2020.

Key messages

- According to the German Federal Criminal Police Office, in 2018 a total of 114 393 woman and 26 362 men were victims of intimate partner violence. For this reason, identifying and assessing domestic violence is a relevant subject for all medical specialties.
- The topic “domestic violence” is associated with extraordinary feelings of shame in the victims.
- The injury patterns in male victims are largely comparable to those in female victims and mainly show the effects of blunt trauma.
- Victims are reticent to report these incidents to the police. This makes documenting the findings in a forensically sound manner all the more important.
- Nationwide special counseling and support networks and shelters for male victims would be a valuable adjunct to medical care.

References

1. Weltgesundheitsorganisation Europa: Weltbericht Gewalt und Gesundheit. Zusammenfassung. www.who.int/violence_injury_prevention/violence/world_report/en/summary_ge.pdf (last accessed on 27 August 2019).
2. Bundesministerium für Familie, Senioren, Frauen und Jugend: Verhütung und Bekämpfung von Gewalt gegen Frauen und häuslicher Gewalt. Gesetz zu dem Übereinkommen des Europarats vom 11. Mai 2011 (Istanbul-Konvention). www.bmfsfj.de/bmfsfj/service/publikationen/verhuetung-und-bekaempfung-von-gewalt-gegen-frauen-und-haeuslicher-gewalt/122282 (last accessed on 30 May 2020)
3. Bundeskriminalamt: Partnerschaftsgewalt. Kriminalstatistische Auswertung. Berichtsjahr 2018. [file:///C:/Users/blaas/Downloads/Partnerschaftsgewalt_2018%20\(1\).pdf](file:///C:/Users/blaas/Downloads/Partnerschaftsgewalt_2018%20(1).pdf) (last accessed on 19 February 2020).
4. Landeskriminalamt Mecklenburg-Vorpommern: Polizeiliche Kriminalstatistik für das Land Mecklenburg-Vorpommern. Berichtsjahr 2018. www.polizei.mvnet.de/static/POL/Dateien/PDF/LKA/PKS/Jahresbericht_PKS_2018.pdf (last accessed on 27 August 2018).
5. FRA – European Union Agency For Fundamental Rights: Violence against women: an EU-wide survey. Results at a glance. Deutsche Übersetzung der Agentur der Europäischen Union für Grundrechte: eine EU-weite Erhebung. Ergebnisse auf einen Blick. www.fra.europa.eu/sites/default/files/fra-2014-vaw-survey-at-a-glance-oct14_de.pdf (last accessed on 19 February 2020).
6. Walter W, Lenz H-J, Puchert R: Gewalt gegen Männer. Personale Gewaltwiderfahrnisse von Männern in Deutschland. Pilotstudie im Auftrag des Bundesministeriums für Familie, Senioren, Frauen und Jugend. www.bmfsfj.de/blob/84590/a3184b9f324b6ccc05bdfc83ac03951e/studie-gewalt-maennerlangfassung-data.pdf (last accessed on 27 August 2018).
7. Schlack R, Rüdell J, Karger A, Hölling H: Körperliche und psychische Gewalterfahrungen in der deutschen Erwachsenenbevölkerung – Ergebnisse der Studie zur Gesundheit Erwachsener in Deutschland (DEGS1). *Bundesgesundheitsbl* 2013; 56: 755–64.
8. Schröttle M: Die Studienergebnisse des Robert Koch-Instituts zu Gewalt gegen Frauen und Männer: Ein Lehrstück für die Notwendigkeit einer methodisch versierten Erfassung, Auswertung und Interpretation geschlechtervergleichender Daten im Rahmen einer geschlechtersensiblen Gewalt- und Gesundheitsforschung. www.rki.de/DE/Content/Gesundheitsmonitoring/Studien/Degs/degs_w1/Basispublikation/Stellungnahme_Schroettle.pdf?__blob=publicationFile (last accessed on 06 March 2020).
9. Baier D: Kriminalitätserfahrungen und Kriminalitätswahrnehmung in der Schweiz – Ergebnisse einer Befragung. Institut für Delinquenz und Kriminalprävention. Zürcher Hochschule für Angewandte Wissenschaften 2019. www.digitalcollection.zhaw.ch/bitstream/11475/18193/3/2019_Baier_Kriminalitaet_c3a4tsoperererfahrungen_und_Kriminalitaet_c3a4tswahrnehmungen_in_der_Schweiz.pdf (last accessed on 6 March 2020).
10. Brzank P, Hellbernd H: Psychische Konsequenzen von häuslicher Gewalt gegen Frauen. *Publ Health Forum* 2006; 49: 15–7.
11. RKI: Gesundheitliche Folgen von Gewalt unter besonderer Berücksichtigung von häuslicher Gewalt gegen Frauen. Berlin: Eigenverlag 2008.
12. Krug EG, Dahlberg LL, Mercy JA, et al.: World report on violence and health. Genf: WHO 2002.
13. Kavemann B: Häusliche Gewalt gegen die Mutter und die Situation der Töchter und Söhne – Ergebnisse neuerer deutscher Untersuchungen. In: Kavemann B, Kreyszig U (eds.): *Handbuch Kinder und häusliche Gewalt*. Wiesbaden: VS Verlag für Sozialwissenschaften 2006, 13–35.
14. Lloyd S, Taluc N: The effects of male violence on female employment. *Violence against women* 1999; 5: 370–92.
15. NCIPC: Costs of intimate partner violence against women in the United States. Atlanta (GA): CDC 2003. www.cdc.gov/violenceprevention/pdf/ipvbook-a.pdf (last accessed on 20 March 2020).
16. Grobe TG, Schwartz F: Arbeitslosigkeit und Gesundheit. Gesundheitsberichterstattung des Bundes. Berlin: Robert Koch-Institut 2003. www.gbe-bund.de/pdf/Heft13.pdf (last accessed on 20 March 2020).
17. Banaschak S, Gerlach K, Seifert D, Bockholt B, Groß H: Forensisch-medizinische Untersuchung von Gewaltopfern. Empfehlungen der Deutschen Gesellschaft für Rechtsmedizin 2014. *Z Rechtsmed* 2014; 24: 405–11.
18. Schröder AS, Hertling S: Medizinische Versorgung von Opfern sexualisierter Gewalt. In: Grassberger M, Yen K, Türk E (eds.): *Klinisch-forensische Medizin*. Wien: Springer 2013; 357–66.
19. Dettmeyer R: Medizinische Maßnahmen zum Zwecke der Beweissicherung. In: *Medizin & Recht*. Berlin, Heidelberg: Springer 2006.
20. Debertin AS, Todt M: Umgang mit Verdachtsfällen auf sexuelle Gewalt. Was muss der Frauenarzt wissen und wie sollte er handeln? *Gynäkologe* 2018; 51: 249–52.
21. Grassberger M, Türk E, Yen K: *Klinisch-forensische Medizin. Interdisziplinärer Praxisleitfaden für Ärzte, Pflegekräfte, Juristen und Betreuer von Gewaltopfern*. Wien, New York: Springer 2013; 36: 39–40.
22. Hellmann D, Blauert K: Häusliche Gewalt gegen Frauen in Deutschland. *SWS-Rundschau* 2014; 54: 78–89.
23. Stanislawski N, Philipp KP, Bockholt B: Untersuchungsstelle für Gewaltopfer am Institut für Rechtsmedizin der Universitätsmedizin Greifswald. *Z Rechtsmed* 2014; 24: 258–62.
24. Mützel E, Helmreich C, Schick S, Saß M, Schöpfer J: Klinisch-forensische Versorgung von Gewaltopfern in Bayern. *Z Rechtsmed* 2014; 24: 200–7.
25. Thureau S, Le Blanc-Louvry I, Thureau S, Gricourt C, Proust B: Conjugal violence: a comparison of violence against men by women and women by men. *J Forensic Leg Med* 2015; 31: 42–6.
26. Spielberg P: Häusliche und sexualisierte Gewalt. Ärzte oft erste Anlaufstelle. *Dtsch Arztebl* 2019; 116: A-2366.
27. Carbone-López K, Kruttschnitt C, Macmillan R: Patterns of intimate partner violence and their associations with physical health, psychological distress, and substance use. *Public Health Rep* 2006; 121: 382–92.
28. Carmo R, Grams A, Magalhães T: Men as victims of intimate partner violence. *J Forensic Leg Med* 2011; 18: 335–59.
29. Schafer J, Caetano R, Clark CL: Rates of intimate partner violence in the United States. *Am J Public Health* 1998; 88: 1702–4.
30. Wang T, Parish WL, Laumann EO, Luo Y: Partner violence and sexual jealousy in China: a population-based survey. *Violence against women* 2009; 15: 774–98.
31. Khalifeh H, Moran P, Borschmann R, et al.: Domestic and sexual violence against patients with severe mental illness. *Psychol Med* 2015; 45: 875–86.
32. Affi TO, MacMillan H, Cox BJ, Asmundson GJG, Stein MB, Sareen J: Mental health correlates of intimate partner violence in marital relationships in a nationally representative sample of male and females. *J Interpers Violence* 2009; 24: 1398–417.
33. Mitra M, Mouradian VE, Foy MH, Pratt C: Prevalence and characteristics of sexual violence against men with disabilities. *Am J Prev Med* 2016; 50: 311–7.
34. Stults CB, Javdani S, Greenbaum CA, Kapadia F, Halkitis PN: Intimate partner violence and sex among young men who have sex with men. *J Adolesc Health* 2016; 58: 215–22.
35. Muellemann RL, Burgess P: Male victims of domestic violence and their history of perpetrating violence. *Acad Emerg Med* 1998; 5: 866–70.
36. Dienye PO, Gbenedo PK: Domestic violence against men in primary care in Nigeria. *Am J of Men's Health* 2009; 3: 333–9.

37. Swan SC, Gambone LJ, Van Horn ML, Snow DL, Sullivan TP: Different factor structures for women's aggression and victimization among women who used aggression against male partners. *Violence Against Women* 2012; 18: 1045–66.
38. Tjaden P, Thoennes N: Prevalence and consequences of male-to-female and female-to-male intimate partner violence as measured by the National Violence Against Women Survey. *Violence Against Women* 2000; 6: 142–61.
39. Lövestad S, Krantz G: Men's and women's exposure and perpetration of partner violence: an epidemiological study from Sweden. *BMC Public Health* 2012; 12: 945.
40. Umubyeyi A, Mogren I, Ntaganira J, Krantz G: Women are considerably more exposed to intimate partner violence than men in Rwanda: results from a population-based-cross-sectional study. *BMC Women's Health* 2014; 14: 99.

Corresponding author

Dr. med. Verena Kolbe
 Institut für Rechtsmedizin, Universitätsmedizin Rostock
 St.-Georg-Str. 108, 18055 Rostock, Germany
 verena.kolbe@med.uni-rostock.de

Cite this as:

Kolbe V, Büttner A:
 Domestic violence against men—prevalence and risk factors. *Dtsch Arztebl Int* 2020; 117: 534–41.
 DOI: 10.3238/arztebl.2020.0534

► **Supplementary material**

For eReferences please refer to:

www.aerzteblatt-international.de/ref3120

CLINICAL SNAPSHOT

Surprising Focus of Infection in Fever of Unknown Origin



An 84-year-old male patient presented to the emergency department with an unexplained decrease in alertness (GCS 13). This was caused by infection accompanied by fever and elevated infection levels (CRP 194 mg/L, leukocytosis 14/nL). Findings at physical examination were unremarkable, with the exception of a large, painless inguinal hernia. Urine status revealed leukocyturia without nitrite detection. Chest X-ray was also normal, whereupon, given the patient's increasingly compromised condition and the lack of a clinical focus of infection, computed tomography of the chest and abdomen was performed for further diagnostic evaluation; this revealed a urinary

bladder that had partly prolapsed into the scrotum and surrounding fat stranding (arrows). Ultrasound yielded no additional information. In light of the irreducible hernia and urinary tract infection, calculated intravenous antibiotic therapy with ceftriaxone was started and prompt inguinal hernia surgery according to the Lichtenstein technique with mesh implantation was carried out. Urine culture showed 10^4 CFU/mL; compliant with in-house guidelines, no further pathogen differentiation was performed. Material obtained intraoperatively for microbiological analysis remained sterile albeit with positive inhibition testing. The postoperative course was unremarkable and the patient was discharged symptom-free and with decreasing inflammatory parameters after 3 days with oral antibiotic therapy.

Dr. med. Katharina Hofheinz, Charité—Universitätsmedizin Berlin, Campus Benjamin Franklin, Interdisziplinäre Rettungsstelle und Aufnahmestation, Berlin

Felix Casper Gianì, Charité—Universitätsmedizin Berlin, Campus Benjamin Franklin, Klinik für Radiologie, Berlin

Dr. med. Jonas Jaromir Staudacher, Charité—Universitätsmedizin Berlin, Campus Benjamin Franklin, Klinik für Gastroenterologie, Rheumatologie und Infektiologie Berlin, jonas.staudacher@charite.de

Conflict of interest statement: The authors state that there are no conflicts of interest.

Translated from the original German by Christine Rye.

Cite this as: Hofheinz K, Gianì FC, Staudacher JJ: Surprising focus of infection in fever of unknown origin. *Dtsch Arztebl Int* 2020; 117: 541. DOI: 10.3238/arztebl.2020.0541

Questions on the article in issue 31–32/2020:

Domestic Violence Against Men—Prevalence and Risk Factors

cme plus+

The submission deadline is 2 August 2021. Only one answer is possible per question. Please select the answer that is most appropriate.

Question 1

What statement is true about physical and psychological violence against men with disabilities or mental disorders (compared with healthy men)?

- a) They are subject to violence less often.
- b) They experience violence just as often.
- c) They are subject to violence more often.
- d) They don't experience psychological violence.
- e) They hardly ever experience violence.

Question 2

What is true for most of the men who are victims of domestic violence?

- a) They themselves committed acts of intimate partner violence in the past.
- b) They report that their relationship has been harmonious to date.
- c) They are more likely to use de-escalating communication to resolve situations of conflict.
- d) They have been oppressed in their relationship.
- e) They have not been known for aggressive behavior in the past.

Question 3

According to the survey of the Rostock outpatient department for victims of domestic violence, from which person does domestic violence against men originate in most cases?

- a) The life partner
- b) The children
- c) The former partner
- d) The wife
- e) The partner in a homosexual relationship

Question 4

Which injuries are mainly found in male victims of domestic violence?

- a) Internal hemorrhages
- b) Severe head injuries
- c) Bone fractures and spinal/vertebral injuries
- d) Impaling injuries
- e) Skin abrasions and hematomas

Question 5

Which are the three phases in the cycle of violence?

- a) Escalating violence, remorse/reconciliation, repeat violence
- b) Tension-building, remorse/reconciliation, and escalating violence
- c) Tension building, conflict discussion, remorse/reconciliation
- d) Tension-building, escalating violence, remorse/reconciliation
- e) Escalating violence, searching for help, remorse/reconciliation

Question 6

What proportion of men in Germany was the victim of domestic violence at the hands of their partners at least once, according to a pilot study from 2004?

- a) 10%
- b) 50%
- c) 25%
- d) 60%
- e) 5%

Question 7

What should the treating physician not forego when treating a victim of domestic violence?

- a) Filing a police report for bodily harm if the patient him/herself does not wish to do so
- b) Documenting the findings in a qualified and forensically sound format, provided the victim of violence has already filed a police report
- c) Making contact with the perpetrator in order to evaluate the potential for harm
- d) Filing a police report for bodily harm because that is the physician's legal obligation
- e) Documenting the findings in a qualified and forensically sound format, independently of whether the victim wishes to file a police report at that particular time.

Question 8.

For which types of violence did the studies included in this review report tententially the highest prevalence rates for physically and mentally healthy men as victims of violence?

- a) Sexual violence and physical violence
- b) Psychological and physical violence
- c) Economic violence and psychological violence
- d) Psychological violence and sexual violence
- e) Economic violence and sexual violence

Question 9

Which reasons were mostly given as triggers for violence (in addition to underlying mental disorders) in the survey of the Rostock outpatient department for victims of violence?

- a) Problems with friends and money worries
- b) Problems in the workplace and accusations of unfaithfulness
- c) Accusations of unfaithfulness and money worries
- d) Problems with the children and money worries
- e) Accusations of unfaithfulness and problems with the children

Question 10

How many men were victims of intimate partner violence in 2018 according to data from the German Federal Criminal Police Office?

- a) About 11 000
- b) About 5 000
- c) About 52 000
- d) About 26 000
- e) About 1 000

Supplementary material to:

Domestic Violence Against Men—Prevalence and Risk Factors

by Verena Kolbe and Andreas Büttner

Dtsch Arztebl Int 2020; 117: 534–41. DOI: 10.3238/arztebl.2020.0534

eReferences

- e1. Mechem CC, Shofer FS, Reinhard SS, Hornig S, Datner E: History of domestic violence among male patients presenting to an urban emergency department. *Acad Emerg Med* 1999; 6: 786–91.
- e2. Archer J: Cross-cultural differences in physical aggression between partners: a social role analysis. *Pers Soc Psychol Rev* 2006; 10: 133–53.
- e3. Breiding MJ: Prevalence and characteristics of sexual violence, stalking, and intimate partner violence victimization—national intimate partner and sexual violence survey, United States, 2011. *MMWR Surveill Summ* 2014; 63: 1–18.
- e4. Fachhochschule für öffentliche Verwaltung, Polizei und Rechtspflege des Landes Mecklenburg-Vorpommern, Universität Greifswald: Befragung zur Sicherheit und Kriminalität in Mecklenburg-Vorpommern. Abschlussbericht zur zweiten Befragung in 2018. www.fh-guestrow.de/doks/forschung/dunkelfeld/Abschlussbericht_Zweite_Befragung.pdf (last accessed on 27 August 2018).
- e5. Walker L: *The battered woman syndrome*. Berlin, Heidelberg, New York: Springer 1984.
- e6. Todt M, Awe M, Roesler B, Germerott T, Debertin AS, Fieguth A: Häusliche Gewalt. Daten, Fakten und Herausforderungen. *Z Rechtsmed* 2016; 26: 499–506.
- e7. Müller U, Schröttle M: Lebenssituation, Sicherheit und Gesundheit von Frauen in Deutschland. Eine repräsentative Untersuchung zu Gewalt gegen Frauen in Deutschland. 2004. www.bmfsfj.de/blob/84328/0c83aab6e685eeddc01712109bcb02b0/langfassungstudie-frauen-teil-eins-data.pdf (last accessed on 27 August 2018).
- e8. Gahr B, Graß H, Ritz-Timme S, et al.: Klinisch-rechtsmedizinische Kompetenz in der Gewaltversorgung. *Z Rechtsmed* 2012; 22: 379–84.
- e9. CORA Landeskoordinierungsstelle: www.cora-mv.de/uploads/media/Tabelle_Gesamtstatistik_2018_nach_Einrichtungen.pdf (last accessed on 26 July 2019).
- e10. Verhoff MA, Kettner M, Lászik A, Ramsthaler F: Digital photo documentation of forensically relevant injuries as part of the clinical first response protocol. *Dtsch Arztebl Int* 2012; 109: 638–42.