

Study on domestic violence: a legal medicine perspective

G.C. Curcă¹, O. Buda¹, C. Căpățână¹, M. Marinescu¹, S. Hostiuc¹, D. Dermengiu¹,
C. Cârfină², V.A. Crețoiu², N.A. Stoica², I. Bădescu³, M. Voinea³, C. Darie³, I. Apostu³,
D.P.G. Banciu⁴, E.G. Balica⁴, O. Brezeanu⁵, A. Constantinescu⁵, V. Gheorghiu⁶, L.Bălan⁷

Received: 27 June 2008 / Accepted: 15 August 2008

Abstract: The present study is a part of a larger national research project no.8687/2006 „A National study on Domestic Violence in Romania: medico-legal, juridical and sociological characteristics identifying new assistance and action directives in the European integration perspective” 2006-2008. The study was conducted in the premises of the National Institute of Legal Medicine Mina Minovici Bucharest NILM, in the new create Unit of Psychological and Sociological Assistance. Partners in the project and the current study come from the Centre for Urban and Regional Sociology (CURS), University of Bucharest Faculty of Sociology-Dept. of Sociology, Romanian Academy Institute of Sociology, Romanian Academy Institute for Juridical Research and the University of Medicine and Pharmacy Carol Davila, Dept. of Legal Medicine. Persons participating to the project were all declared victims of domestic violence. In Romanian Legal Medicine clinical legal medicine examinations are performed only in the legal medicine system. All persons were informed of their rights and asked to complete a fully informed consent form. A comparative study was done on domestic violence cases addressed to the NILM in 2003 and 2007. All victims received a short questionnaire (sociologic questionnaire no. 1, 16 items) and at the consulting activities an extended questionnaire (sociologic and psychological questionnaire no.2, 61 items). Domestic violence decreased in 2007 vs. 2003 as much as comparative with the total number of aggression cases: female : male 12,70% : 9,01%. We found out 788 declared victims of domestic violence (11,78% from all cases, 9,49 from all hetero-aggressions). Female/male ratio 18,7. Mean age of victims is 40 years old with a normal distribution for women. 70,43% off all victims accepted to fill in the sociologic questionnaire no.1. 114 cases (14,46%) accepted to enter into project in a more deep research filling in the sociologic and psychological questionnaire no.2: these persons benefit from consulting, advices, addresses and contacts toward police, governmental/nongovernmental agencies for protecting women and children, shelters, etc. Low to medium severity injuries are to be seen (ecchymosis in more than 80%). The vast majority of cases needed 2-5 days medical care days period. However bone fractures have been seen also (1,26%) and are intense injuries. Strong similarities are to be seen in type and topographic distribution of traumatic injuries in 2003 and 2007. Socio-economic costs were evaluated also and a medium case cost (M_{cc}) was calculated. Medium cost/case, M_{cc} , for the most frequent social categories analysis reveals that people with higher monthly income do have higher domestic violence associated costs. M_{cc} in our study is 122 € variable with the diagnostic, social status or profession.

Keywords: domestic violence; violence against women; sociology, psychology, forensic medicine

*) *Corresponding author: Assoc. Professor, MD, PhD, Carol Davila University of Medicine and Pharmacy Bucharest, Faculty of Medicine, Department of Legal Medicine, Sos. Vitan Birzesti 9, Sector 4, 042122 Bucharest, ✉ e-mail: cgcurca@yahoo.com*

1) National Institute of Legal Medicine „Mina Minovici” Bucharest, 2) Urban and Regional Centre of Sociology, CURS, 3) University of Bucharest, Fac. of Sociology and Social Assistance, Dept. of Sociology, 4) Romanian Academy, Institute of Sociology, 5) Romanian Academy, Institute of Juridical Research, 6) Carol Davila University of Medicine and Pharmacy Bucharest, Faculty of Medicine, Department of Legal Medicine, 7) Department of Legal Medicine, Suceava County, Suceava.

SHORT REVIEW ON DOMESTIC VIOLENCE

Despite the outpouring research in the past 20 years, many gaps still exist in the understanding of domestic violence's mechanisms. Nowadays comprehensive norms are stated in the civilized world but these are to be put in practice with both governmental and nongovernmental effort; domestic violence must be considered a true social priority. The responsibility bears on governments (official responsibility) spreading by social mechanisms to social structures -i.e. nongovernmental agencies- (social responsibility) reinforced by social commitment and civic involvement and dissipating toward the citizens (individual responsibility). The chain of responsibility is reversible and basically is a social pyramid shape. Besides doing or not doing, helping or not helping, offering or refusing, the core mechanism is inside the family. Responsibility is a character attribute of individual toward the society no matter the social rank. Societies gather respect of all individuals driving out toward society their sound behaviour expressed within their families.

Every society is a larger family, a sum of positive/negative traits emerging from the families composing. Of course this large family may oblige individuals to pay respect but this might never be considered a success because obligations are prone to disrespect. Measures which are not supported from within the family i.e. arising women awareness, respect and duty toward the partner, ethical beliefs, religious beliefs, etc., will not lead eventually to an overwhelming success. Therefore individuals and governments have to work together meeting their hands together. Domestic violence is unfortunately an everlasting phenomenon, an expression of power and domination, coming throughout Dark Age of time as a violent behaviour mostly man linked. However individual beliefs may be patched: low acceptability for men, rise awareness and self-esteem for women and increased mutual respect seem to be the correct trend; this must be sustained by vigorous actions which may help to fight against old demons even if human traits and behaviours modify only slight.

Domestic Violence can be defined as a set of systematical behavioral violence acts (physical, verbal, sexual or it may take the form of continual and habitual psychological, social or financial abuse financial) occurring within a household or between family members [1].



Its most common form is violence by a husband against a wife (legal or de facto) but it can also include violence by wife against a husband or child against parent [1]. Violence by parent against child is more commonly referred to as child abuse.

A distinction must be made for a correct understanding between violence within family, domestic violence, violence against women or child abuse.

Fig. 1 Domestic violence structure

For the purposes of the Recommendation Rec (2002) 5 of EU [3] the term “violence against women” is to be understood as any act of gender-based violence, which results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion, or arbitrary deprivation of liberty, whether occurring in public or private life [3].

In western countries it is estimated that about 25% of women experience intimate partner violence over their lifetimes [2, 3, 4] (i.e. UK 25%, Russia 25%, Estonia 25%), lower than in other continents (i.e. USA 28%, Chile 26%, Kenya 42%, Egypt 35%, India 45%, Thailand 20% [5]).

Cultural	Gender-specific socialization Cultural definitions of appropriate sex roles Expectations of roles within relationships Belief in the inherent superiority of males Values that give men property rights over women and girls Notion of the family as the private sphere and under male control Customs of marriage (bride price/dowry) Acceptability of violence as a means to resolve conflict
Economic	Women's economic dependence on men Limited access to cash and credit Discriminatory laws regarding inheritance, property rights, use of communal lands, and maintenance after divorce or widowhood Limited access to employment in formal and informal sectors Limited access to education and training for women
Legal	Lesser legal status of women either by written law and/or by practice Laws regarding divorce, child custody, maintenance and inheritance Legal definitions of rape and domestic abuse Low levels of legal literacy among women Intensive treatment of women and girls by police and judiciary
Political	Under-representative of women, politics, the media and in the legal and medical professions Domestic violence not taken seriously Notions of family being private and beyond control of the state Risk of challenge to status quo/religious laws Limited organizations of women as a political force Limited participation of women in organized political system

Table 1. Factors that perpetuate domestic violence. Source: Heise, 1994 cited by E, Garcia, J. Herrero [2]

However an impressive number of unreported cases makes us talk about an iceberg phenomenon [6]

Study reports examine what Europeans think about issues relating to domestic violence against women [7]. When a total of 16 179 people were polled (an average of around 1000 per country), 11% responded that knew of someone where they worked or studied, 18% in their neighbourhood or immediate area and 19% in their circle of friends and family.

As for the causes of domestic violence against women, 96% of Europeans cited alcoholism, 94% drug addiction, 79% unemployment, 75% poverty/social exclusion, 73% “having oneself been a victim of some form of domestic violence”, 64% the way women are viewed by men, 64% a genetic predisposition to violent behaviour, 59% the way power is shared between the sexes, 57% a low level of education, 49% the media, 47% religious beliefs and 46% the provocative behaviour of women [7].

Violence against women throughout the life cycle may vary according to the developmental phase [8].

Phase	type of violence
Pre-birth	effects of battering during pregnancy on outcomes
Infancy	infanticide, physical, sexual and psychological abuse
Girlhood	child marriage, child prostitution and pornography, physical, sexual and psychological abuse
Adolescence and adulthood	incest, sexual abuse in the workplace, partner violence, partner homicide, forced pregnancy, psychological and physical abuse of women with disabilities
Elderly	physical, sexual and psychological abuse, forced "suicide" of widows for economic reasons

Table 2. Woman biological developmental phases and directed violence. Source Innocenti Research Centre Study „*Children and Violence*” June 2000 [8], http://www.unicef.org/research/index_39912.html

Consequences on woman development are often complex and difficult to monitorize. Causality for each important negative outcome arising in one woman life might be link to domestic violence but this is difficult to ascertain and moreover treated as a secret even from one's woman side. More often she might never talk about and might never give access.

Non-fatal outcomes	Physical health outcomes	Injuries, unwanted pregnancy, gynaecological problems, STDs including HIV/AIDS, Miscarriage, Pelvic inflammatory disease, chronic pelvic pain, headaches, permanent disabilities, asthma, irritable bowel syndrome, self-injurious behaviours (smoking, unprotected sex, etc.)
	Mental health outcomes	Depression, fear, anxiety, low self esteem, sexual dysfunction. Eating problems, obsessive-compulsive disorder, post traumatic stress disorder
Fatal outcomes		Suicide, homicide, maternal mortality, HIV/AIDS

Table 3. Health consequences of violence against women (Source: „Violence against Women, WHO Consultaion, 1996 cited by E, Garcia, J. Herrero [2])

Victim awareness but also population acceptability, particularly men, are two important issues when approaching domestic violence phenomenon. Studies prove that acceptability is higher among men who know a perpetrator and lower among men who know a victim [2]. Victim blaming attitude is associated with higher levels of acceptability. In countries with higher gender empowerment measure the difference in acceptability among those who blame and those who do not blame the victim is greater. There are still widespread attitudes in the EU such as victim blaming contributing to a climate of social acceptability of domestic violence against women, DVAW. Further efforts to reduce the acceptability of DVAW are still needed [2]. Socio-economic costs of violence rises and generate negative interconnections leading to unbrokeable vicious circles. There is a need for correct assess and evaluations and direct actions. Since 1993, the Council of Europe has made the combat against violence one of its priorities [9]. „Everyone has the right to respect for his or her physical and mental integrity” [10] is a landmark which impose valid actions and vigorous decisions (Charter of Fundamental Rights of the European Union (2000/c 364/01).

Direct costs	Medical Police Criminal justice system Housing Social service
Non-monetary costs: pain and suffering	Increased morbidity Increased mortality via homicide and suicide Abuse of alcohol and drugs

	Depressive disorders
Economic multiplier effects: macro-economic, labour market, inter-generational productivity impacts	Decreased labour market participation Reduced productivity on the job Lower earnings Increased absenteeism Intergenerational productivity impacts via grade repetition and lower education attainment of children Decreased investment and saving Capital flight
Social multiplier effects: impact on interpersonal relations and quality of life	Intergenerational transmission of violence Reduced quality of life Erosion of social capital Reduced participation in democratic process

Table 4. Typology of socio-economic costs of violence. Source Buvinic et al, 1999, cited by E, Garcia, J. Herrero [2])

Romania, as all EU countries [11], adapted and completed its legislation in 2003 [12, 13] accomplishing EU framework. On 27 November 2006, the Council of Europe launched a Campaign [9] to combat violence against women, including domestic violence which generated the Decision of the European Parliament and of the Council (no. 779/2007/EC, 20th June 2007) establishing for the period 2007-2013 a specific programme to prevent and combat violence against children, young people and women and to protect victims and groups at risk (Daphne III programme) as part of the General Programme 'Fundamental Rights and Justice' [14]. Previous studies in Romania such as „Abuse and Neglect of the Child in the family” (Centre for Urban and Regional Sociology, CURS), presents in 2000 the following data:

Synthetic indicators for child abuse / neglect in family	TOTAL N= 1556		Urban N=852		Country N=704	
	n	%	n	%	n	%
Physical abuse	287	18.4%	124	14.6%	163	23.2%
Physical neglect	1055	67.8%	538	63.1%	517	73.4%
Children in poor families	867	55,7%	414	48,6%	453	64,3%
Exploitation of children in their families	106	6.8%	35	4.1%	71	10.1%
Educational neglect	888	57.1%	502	58.9%	386	54.8%
Verbal aggression	993	63.8%	531	62.3%	462	65.6%
Psychological abuse	398	25.6%	198	23.2%	200	28.4%
Psychological neglect	708	45.5%	333	39.1%	375	53.3%
Sexual abuse	1	0.1%	-	0.0%	1	0.1%

Table 5. Prevalence of child abuse/neglect cases in Romania: a total number and a view on residential environment. Source: „Abuse and Neglect of the Child in the family” (Centre for Urban Sociology, CURS), Bucharest 2000

Gallup Organization, May 2003, indicate that at least 42% of women in Bucharest, Romanian capital, experienced at least one in a lifetime a violent action (verbal, eotional or physical) from their husband, 24% in the last 12 months (May 2002-May 2003).

Partenership Centre for Equality and IMAS (Institute of Marketing and Polling), two important Romanian sociological organizations published in 2003 a national poll which took over in 2002 including more than 1200 persons: the aim was to analyze domestic violence type behavior. The results were that more than 800.000 women experienced once in a lifetime at least one of different forms of violence (physical, psychological, verbal, economic); more than 340.000 children 0-14 years old attended involuntarily to violent domestic scenes and more than 370.000 children attended verbal violent speech at the same occasions or different occasions.

A study conducted in 2001-2006 in Suceava county Romania on 250 women and 150 men from urban and rural environment [15] present that people rely for intervention firstly on family, friends and neighbors and only after to the police, Fig.2.

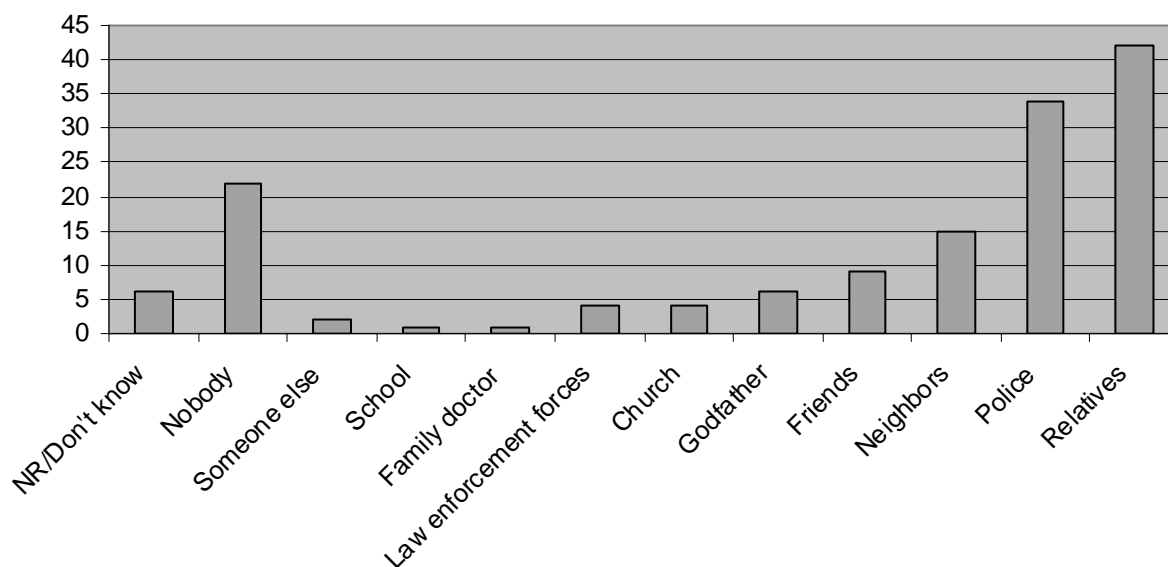


Fig. 2 Who is to rely first in case of domestic violence? Source: L. Balan, 2008 [15]

Asked what are the most terrifying situation that they may imagine, they answer as following (Fig 3).

Usually victims of domestic violence experience consequences (physical and emotional). Sometimes sequealae may be seen. Almost always there is a double victim action because children usually assist the scene. They my experience also severe emotional trauma leading to chronic social inaptabilities (i.e lower efficiency at the learning activities): therefore we may discuss about a “syndrome of domestic violence victim”. Domestic violence remains a complex phenomenon which expand socio-economic roots sometimes difficult to cut. For instance every time when police force take measures by fining the agressor (usually the man) this repercute the family budget because frequently in such cases battered women are not economically independent. Therefore the victims does not declare another violent behaviour of the husband fearing that a new fine will be applied in cause. Proximity policemen have to have a more committed approach and intervention especially by multiplying unexpected visits at the place of aggression in order to monitorize the family.

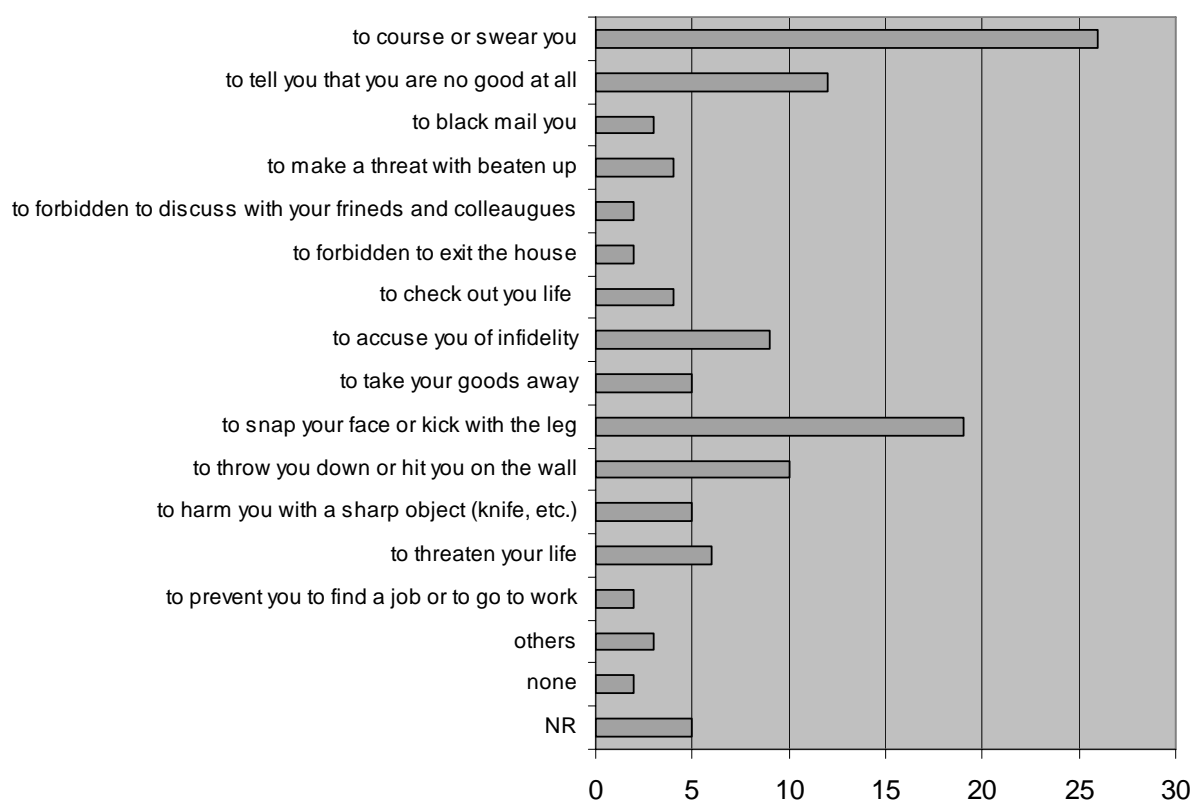


Fig. 3. The most terrifying situations that victims of domestic violence may experienced: Source: L. Balan, 2008 [15]

METHODOLOGY

The present study is a part of a larger national research project no.8687 CEEX CNMP BIOTECH „A National study on Domestic Violence in Romania: medico-legal, juridical and sociological characteristics identifying new assistance and action directives in the European integration perspective” 2006-2008.

The study was conducted between 10th August 2007-15th March 2008 in the premises of the National Institute of Legal Medicine Mina Minovici Bucharest on domestic violence victims asking for a clinical legal medicine examination. In Romanian Legal Medicine clinical legal medicine examinations are performed only in the legal medicine system.

There were numbered 4540 domestic violence cases (female/male 0,96 ratio) from Bucharest and surrounding areas (Bucharest, city population 1.931.838; metro population 2.600.000; density 8,510/km² [16]).

All persons were asked to declare if they are victim of domestic violence in term of statistics and report. 788 persons (female/male ratio 18,7) declare to be a victim of domestic violence. All persons were examined in the National Institute of Legal Medicine Institute and a legal medicine report was concluded within a few days. Immediately after the examination all persons have been asked to fill in voluntarily the form of a short questionnaire (questionnaire 1 with 16 sociological items): 70,43% accepted (n=555). These initial responsive persons were invited to take further on part to the more complete study in their benefits.

The study was conducted in the premises of the National Institute of Legal Medicine Mina Minovici Bucharest, NILM, in the Unit of Psychological and Sociological Assistance.

Partners in the project and the current study come from the Centre for Urban and Regional Sociology (CURS), University of Bucharest Faculty of Sociology-Dept. of Sociology, Romanian Academy Institute of Sociology, Romanian Academy Institute for Juridical Research and the University of Medicine and Pharmacy Carol Davila, Dept. of Legal Medicine.

One psychologist, 1-2 sociologists, one lawyer and 1-2 medical doctors were offering free consulting activities asking for details to be filled in a more ample questionnaire (questionnaire 2, with 61 items): 106 persons (13,45%, n=106) admitted to continue the project and to consult the specialists. The persons were fully informed of their rights; a full list with governmental and non governmental organisations able to bring help was provided including important addresses, contact data (mobile phone number), shelter contacts, contacts directly to the National Agency for Protecting Family, ANPF, and their non-stop point rescue centre.

An informed consent was presented and signed before entering the study. At any moment the persons were keeping the free choice to continue the study or to decline it.

A previous agreement between NILM and ANPF provided all victims a partial or complete refund of their medical expenses on the public budget if they accepted to present themselves to the non-stop point rescue centre of the National Agency for Protecting Family.

50 persons asked for a juridical consult (6,34% from the total number of declared victims);

In terms of 7 months only 2 persons were continuing the juridical procedures to get the divorce; only one eventually concluded the divorce (4% from all persons asking for a juridical consult, 0,25% from the total number of declared victims).

A comparative study was done on domestic violence cases addressed to the NILM in 2003 and 2007. In every case several items were analyzed: gender, age, addressability toward the legal medicine institution (delay), hospitalization days required if necessary, severity of the traumatic lesions, sequel if any, topographic situation and traumatic type (lacerations, blunt injuries, etc.).

Socio-economic costs were evaluated. In order to determine an average value for domestic violence costs we used the following:

Medium case cost (M_{cc}) represents the medium cost for each case and is calculated by the following formula:

$$M_{cc} = L_c + (T_{ls} + H) / n = L_c + [(\sum v_p \times P_{ii} \times D) / 22 + n(20 + 100x_d + 100x_n + 60x_a + 300x_o)] / n$$

where (L_c = legal medicine examination cost, T_{ls} =total day loss, H =hospitalisation costs, n =number of cases)

RESULTS AND DISCUSSIONS

If we draw a short comparative view on domestic violence encountered in the legal medicine practice in NILM in 2003 versus 2007 are summarized in Table 6.

Total number of violent heteroagressions beaten up, rape, etc. (minus road traffic accidents) in 2007 is increased comparative to 2003: 8297 : 6157 on the clinical legal medicine examinations at personal order which increased accordingly 6689 : 4394.

Road traffic accidents examinations decreased also in 2007 vs. 2003: 757:1038.

Domestic violence decreased in 2007 vs. 2003 as much as comparative with the total number of cases examined at personal base order in the clinical legal medicine dept. (11,78%: 18,86%) and the total number of hetero agresions cases both on personal basis order or official order-road traffic accidents not included- (9,49% : 13,46%).

Violence against women decreased in 2007 vs. 2003 as much as comparative with the total number of coresponding gender cases (31,59% : 16,41%), total number of cases examined at personal base order in the clinical legal medicine dept. (17,79% : 11,18%) and eventually the total number of hetero agresions cases both on personal basis order or official order road traffic accidents not included- (12,70% : 9,01%).

As far as men, domestic violence decrease is lesser important in 2007 vs. 2003: 0,59%: 1,06% comparative with the total number of cases examined at personal base order in the clinical legal medicine dept. and 0,48%:0,76%.

However it appears interesting that depite the decrease of the total number of domestic violence cases and violence against women, relative number cases of known (declared) husband agressor cases is very much similar, 2007: 2003 45,32% : 42,07% which is by far almost half of the beaten up cases (the rest are partners, other members or undeclared cases); this express the fact that the total number cases with husband agresors rised up.

Female/male ratio 18,7. Mean age of victims is 40 years old with a normal distribution for women. 70,43% off all victims accepted to fill in the sociologic questionnaire no.1. 114 cases (14,46%) accepted to enter into project in a more deep research filling in the sociologic and psychological questionnaire no.2: these persons benefit from consulting, advices, addresses and contacts toward police, governmental/nongovernmental agencies for protecting women and children, shelters, etc.

Year to study	2003			2007		
Total cases of clinical legal medicine examinations at personal order n. / total cases of clinical legal medicine examinations at official order n.		4394*/ 2801**			6689*/ 2365**	
		Domestic violence	Non-domestic violence		Domestic violence	Non-domestic violence
Female	2475 (56,32%)	782 (31,59%/17,79% %†/12,70%‡)	1693 (68,40%)	4556 (68,11%)	748 (16,41%/11,18% 8%/9,01)	3808 (83,58%)
• Declared aggressor: actual husband		329 (42,07%)			339 (45,32%)	
• Declared aggressor: present/ex partner, ex husband, other members o the family		99 (12,65%)			142 (18,98%)	

• Undeclared aggressor		354 (45,26%)			227 (30,34%)	
Male n.	1919 (43,67%)	47 (2,44%/1,06† %/ 0,76%‡)	1872	2133 (31,88%)	40 (1,87%/0,59† %/0,48%‡)	2093
Total cases of clinical legal medicine examinations at personal order n.	4394	829 (18,86%/13,46 %‡)	3565	6689	788 (11,78%/9,49 %‡)	5901

Table 6. Short comparison between 2003 and 2007 domestic violence structure as reported in the NILM data base.

* legal medicine examinations at personal order; road traffic accidents are examined only at official demand, therefore total cases of clinical legal medicine examinations at personal order are aggressions

** legal medicine examinations at official order (police, etc.); 2003: aggressions / traffic accidents 1763 / 1038, 2007: aggressions / traffic accidents 1608 / 757. Total aggression 2003: official order + personal order = 1763 + 4394 = 6157. Total aggressions 2007: official order + personal order = 1608 + 6689 = 8297

† Percentile comparator with total number of clinical legal medicine examinations at personal order

‡ Percentile comparator with total number of violent hetero aggressions (beaten up, rape, etc.) minus road traffic accidents

Traumatic injuries type

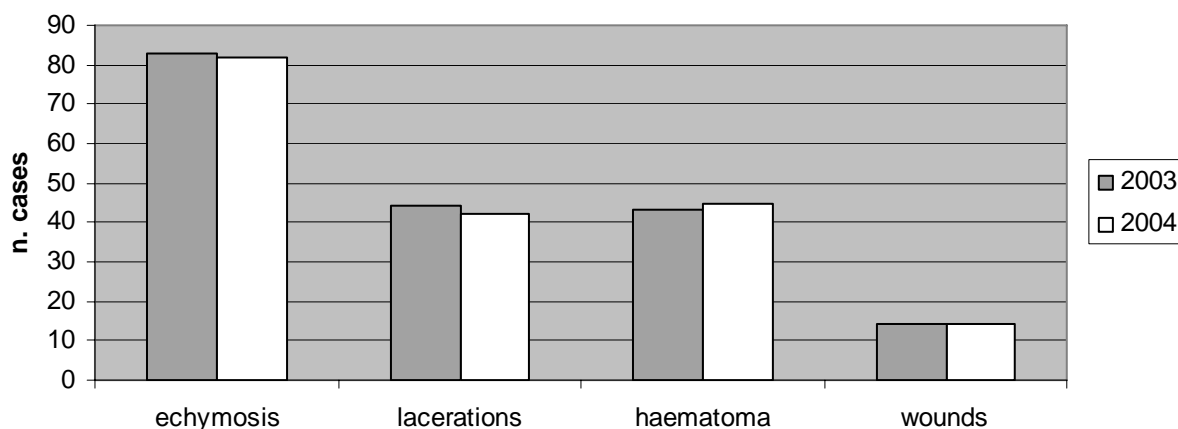


Fig. 4. Traumatic injuries type in 2003 versus 2007 domestic violence cases.

Bone fractures encountered in average 10% of n. cases similar in 2003 and 2007. Hospitalization number days in 2003 was 0,42 versus 0,43 in 2007 and the severity correlating legal medicine evaluation and specialist evaluation is 4,3 in 2003 versus 4,36 in 2007.

Strong similarities are to be seen in type and topographic distribution of traumatic injuries in 2003 and 2007.

Mean age of victims is 40 years old with a normal distribution for women (statistically significant) and relative homogenous for men (without statistic significance due to relative small number of cases).

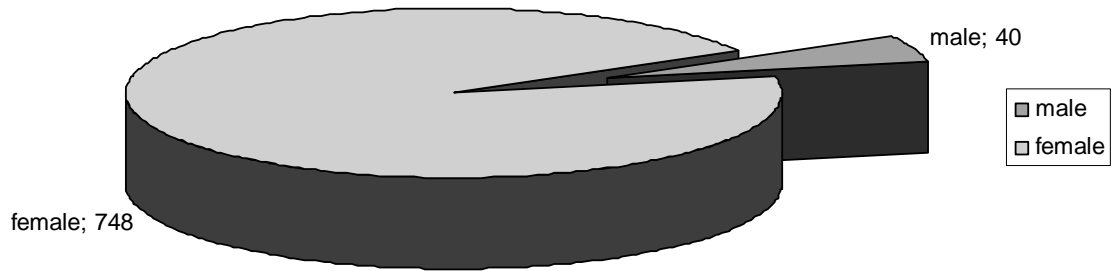


Fig. 5 Age distribution

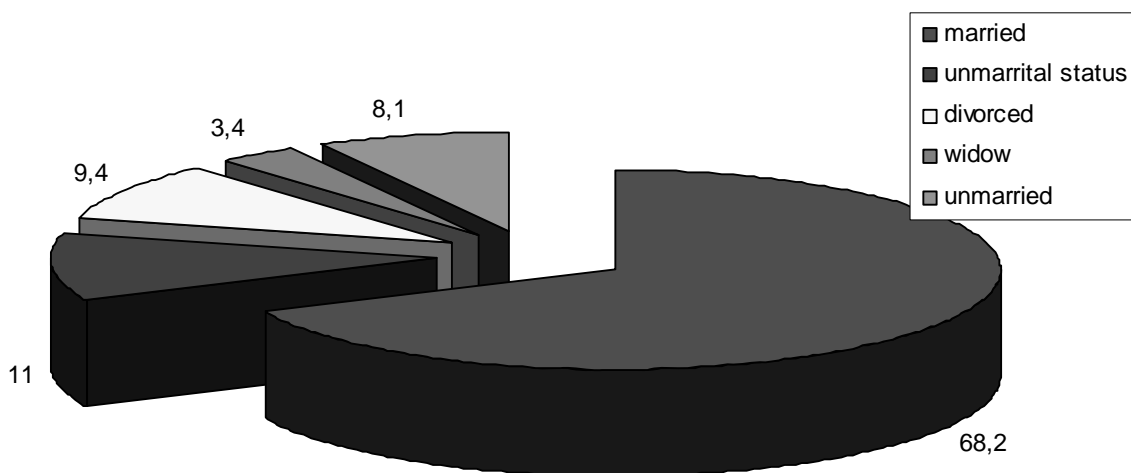


Fig. 6 Marital / marital status (percentile evaluation).

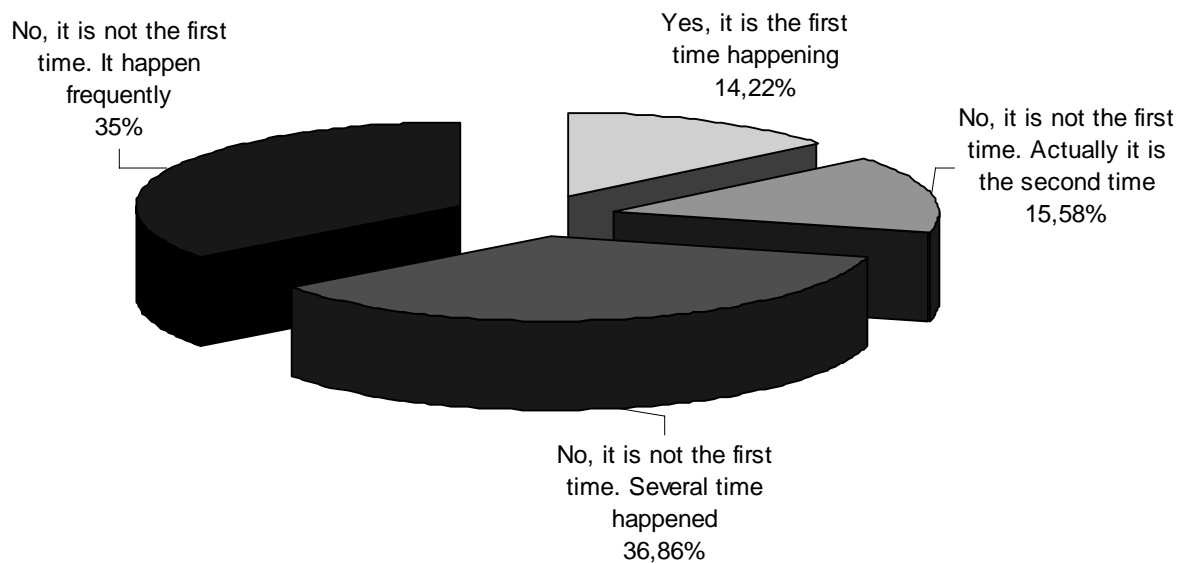


Fig. 7 Frequency of the physical abuse.

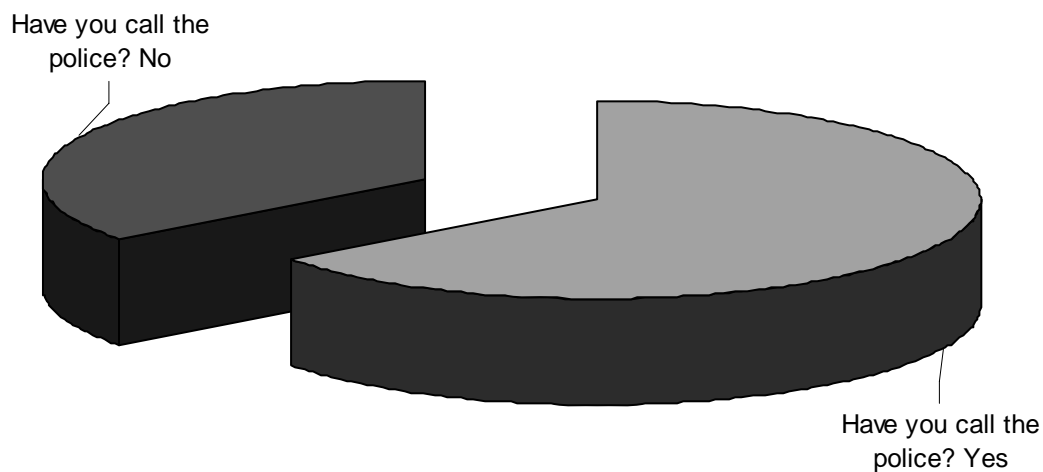


Fig. 8 Addressability toward police or law enforcement order structures.

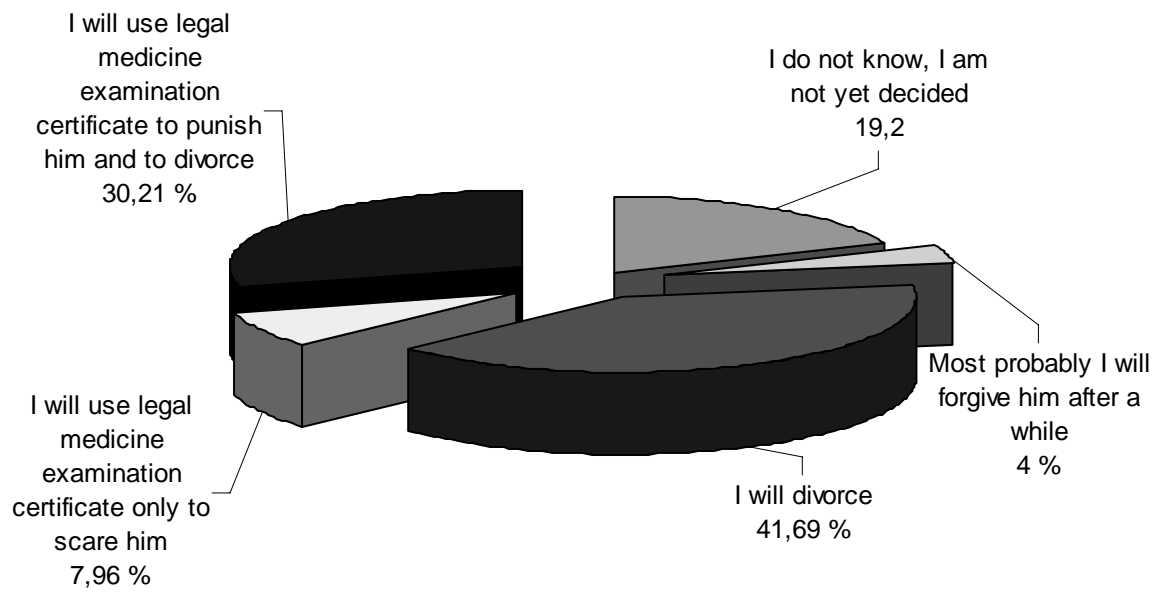


Fig. 9 The victims are asked what their intentions are. Despite the initial intention to divorce, as presented previously, actually less than 1% will eventually get legal separation.

As a mean the delay time was 1.8 days; the distribution is high leptokurtosis (Kurtosis =14,132), most values being close to the mean. Majority of the victims comes the second day.

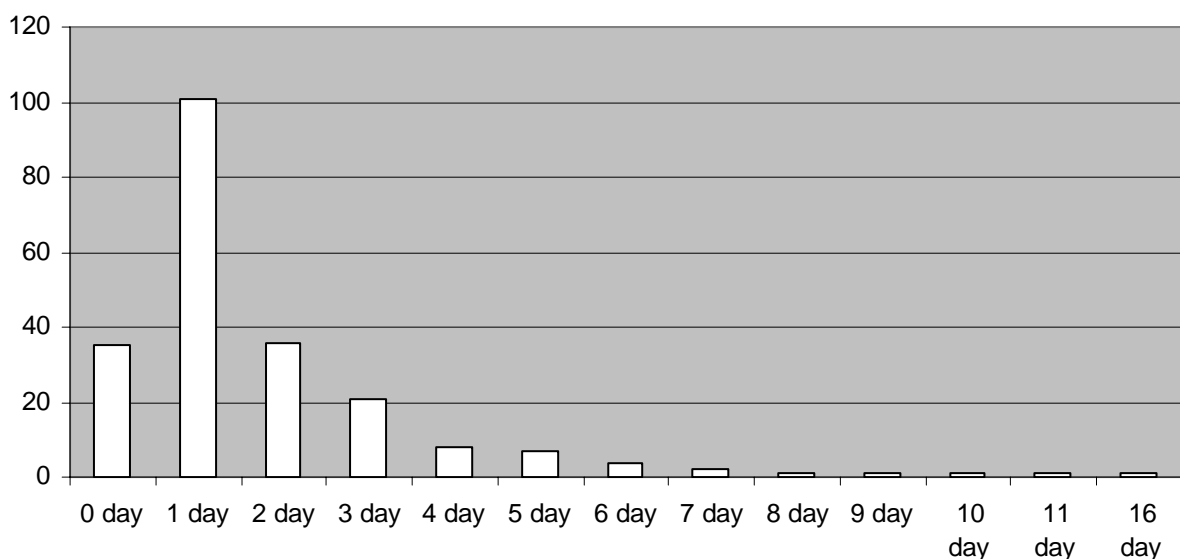


Fig. 10 Addressability toward legal medicine. Interval of delay between the physical abuse and the requested examination at the NILM Mina Minovici Bucharest. Most of the victims required medico-legal examination the next day after the violent abuse.

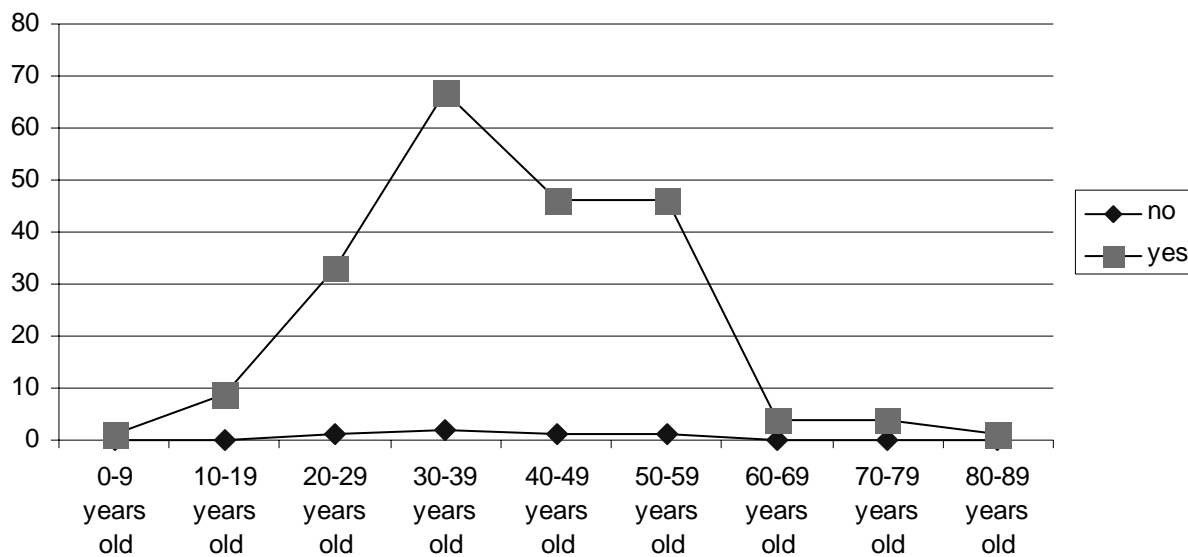


Fig. 11. Age-related traumatic injuries. Very few cases did not had injuries at the moment of examination. As for the rest of the cases the peak is 30-39 years old, victim’s age most frequent.

Only 4% cases have not from presented objectively traumatic injuries at the legal medicine examination; topographically 69,5% of injuries were localized on the head, 24,2% on the body and 58,9% on the limbs. There have been noted complex associations also.

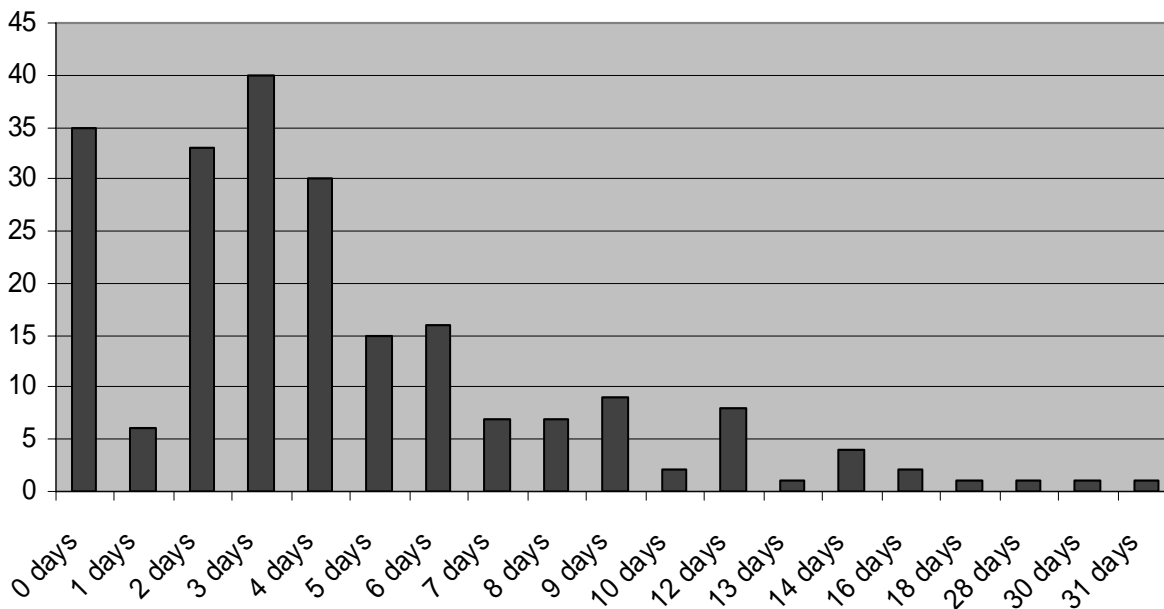


Fig. 12 The estimated medico-legal period of medical care. Medico-legal evaluation of medical care deals with effective medical care and is different from time of healing, time of temporary work incapacity or general medical care (which may go on indefinitely).

The medico-legal period of medical care is an indicator for severity and it is used in the Romanian Penal Code as judicial criteria to assess the severity of a traumatic injury. Of course only those lesions which are causative linked directly or indirectly to the trauma may be evaluated medico-legal as period of medical care scale. Therefore hospitalization time or the healing time may differ from the medico-legal period of medical care.

Elder people may need more medical care period of time (Pearson correlation 0,156, significative at level 0,05). As far as the medical care is longer the interests to participate in the project, to give answers and to fill up questionnaires decreases (Pearson correlation - 0,064).

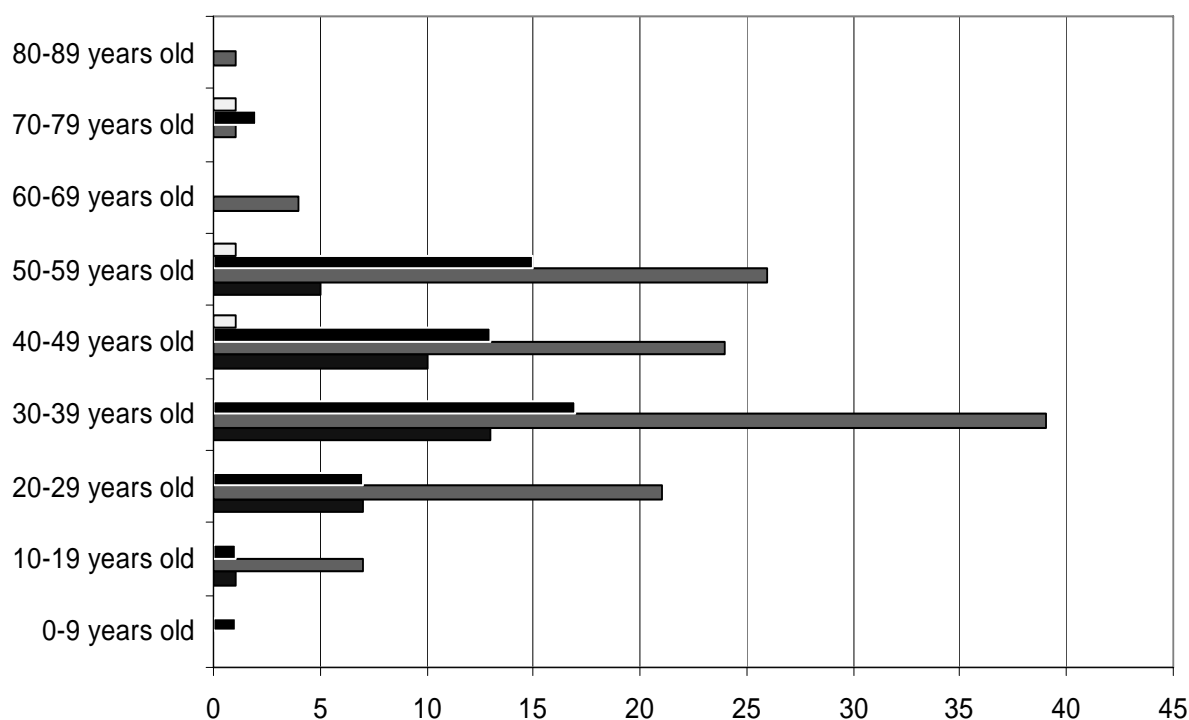


Fig. 13 Cross tabulation between age group and medical care period of time. Yellow: does not need medical care; blue: 1-5 days; black: 6-19 days; green: more than 20 days of medical care.

Medium cost, M_{cc} , for the most frequent social categories analysis reveals that people with higher monthly income do have higher domestic violence associated costs. Monthly income does not necessarily associate higher education. Therefore we may not draw up an association between education level and medical costs.

Social group	Mean salary	Mean value (M_{cc})
Economy	3747 RON (1070 €)	812 RON (232 €)
Civil servants	2757 RON (787 €)	435 RON (124 €)
Education	1974 RON (557 €)	448 RON (128 €)
Health	1705 RON (487 €)	404 RON (115 €)
Industry/Construction	1566 RON (448 €)	552 RON (158 €)
Workers	1400 RON (400 €)	524 RON (150 €)

Table 7. Medium cost, M_{cc} , in cases of domestic violence in Romania

Taking into consideration no. of cases, mean salary, hospitalization period and severity (legal medicine evaluation) M_{cc} in our study is 427 RON (122 €).

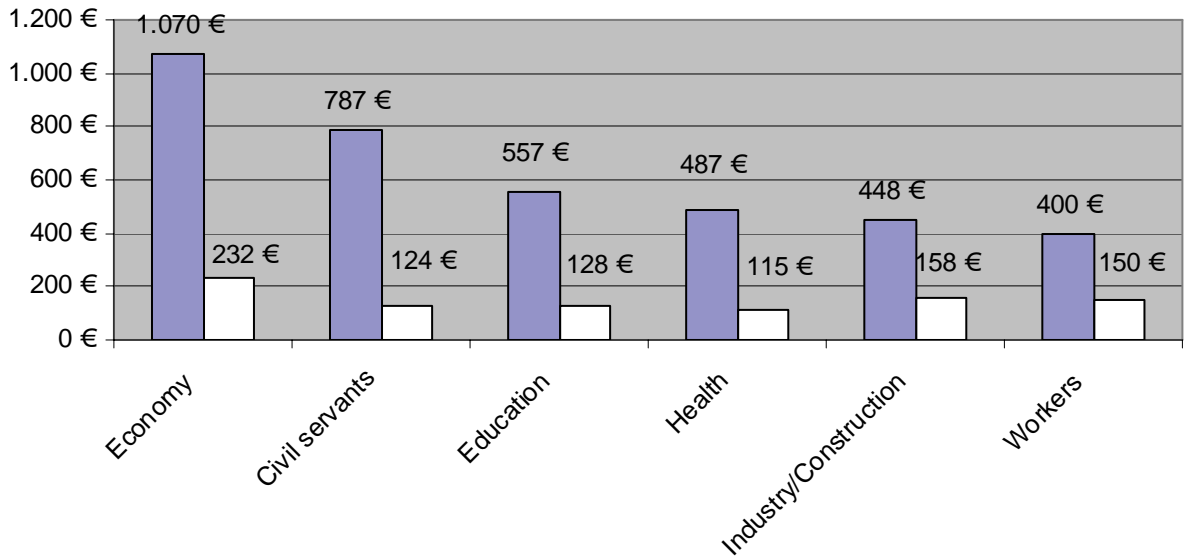


Fig. 14 A classification for monthly income (blue) cross-tabulated with the medium cost, M_{cc} , (white) implied by domestic violence cases (medical costs, economic costs). Except for higher monthly income which almost double M_{cc} costs; a variable 400-787 € monthly income does not change grossly the medical care costs.

Some relevant cases (personal collection). Note: The colour of injuries does not allow a solid scientific dating of the hetero aggression.



Fig. 15 Intense bruises of similar colour: two distinct blows.



Fig. 16 Open wound and an old bruise (recent domestic violence abuse).



Fig.17 A severely beaten up women (husband as aggressor) using a belt.



Fig.18 Different bruises of different colour, dating a domestic violence abuse

References

1. Domestic Violence. Web resource: <http://www.womensactionalliance.com.au/domesticViolence.html>
2. Gracia E, Herrero J. Acceptability of domestic violence against women in the European Union: a multilevel analysis. *Journal of Epidemiology and Community Health*, 2006; 60:123-129.
3. Council of Europe. Recommendation Rec (2002) 5 of the Committee of Ministers to member States on the protection of women against violence adopted on 30 April 2002 and Explanatory Memorandum. Strasbourg, France: Council of Europe, 2002. Web resource: [http://www.coe.int/t/e/human_rights/equality/05_violence_against_women/003_Rec\(2002\)05.asp](http://www.coe.int/t/e/human_rights/equality/05_violence_against_women/003_Rec(2002)05.asp)
4. American Medical Association [AMA]; International Planned Parenthood Federation [IPPF]. Western Hemisphere Region [WHR]. Diagnostic and treatment guidelines on domestic violence. New York, IPPF, WHR: American Medical Association, 1994.
5. UNICEF Innocenti Research Centre. Woman in transition. UNICEF MONEE Project Regional Monitoring Report, number 6 (UNICEF, Florence); adapted from Violence against women, WHO, FRH/WHO/97.8, 1999. Web resource: <http://www.unicef-irc.org/publications/pdf/monee6sume.pdf>
6. Gracia E. Unreported cases of domestic violence against women: towards an epidemiology of social silence, tolerance, and inhibition. *Journal of Epidemiology and Community Health*, 2004; 58:536-537.
7. EuroBarometer 51.0 "Europeans and their views on Domestic Violence against women", European Commission Directorate-General X "Information, Communication, Culture and Audiovisual Media", June 1999. Web resource: http://ec.europa.eu/public_opinion/archives/ebs/ebs_127_en.pdf
8. Innocenti Digest, no. 6, June 2000, "Domestic Violence against women and girls", UNICEF, Innocenti Research Centre Study "Children and Violence", Innocenti Research Centre Florence, Italy. Web resource: <http://www.unicef-irc.org/publications/pdf/digest6e.pdf>
9. Violence against Women. Web resource: http://www.coe.int/T/E/Human_Rights/Equality/05_Violence_against_women/
10. Charter of Fundamental Rights of the European Union (2000/c 364/01), Chapter I, Dignity, Article 3, Right to the integrity of the person, al.1. Web resource: http://ec.europa.eu/external_relations/human_rights/doc/charter_364_01en.pdf
11. EG (2007) 1 Legislation in the member States of the Council of Europe in the field of violence against women. Web resource: [http://www.coe.int/t/e/human_rights/equality/05_violence_against_women/076_EG\(2007\)1_E.asp](http://www.coe.int/t/e/human_rights/equality/05_violence_against_women/076_EG(2007)1_E.asp)
12. Legislation In The Member States Of The Council Of Europe In The Field Of Violence Against Women Volume 2: Italy to United Kingdom. Web resource: http://www.coe.int/t/e/human_rights/equality/PDF_EG_2007_1_vol2_E.pdf
13. Law no. 217/2003 to prevent and fight against domestic violence (officially published in MO, Part I, no. 367/29.05.2003 in force from 27th August 2003.
14. Decision No 779/2007/Ec Of The European Parliament and of The Council of 20 June 2007 establishing for the period 2007-2013 a specific programme to prevent and combat violence against children, young people and women and to protect victims and groups at risk (Daphne III programme) as part of the General Programme 'Fundamental Rights and Justice'. Web resource: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:173:0019:0026:EN:PDF>
15. Bălan L. Agresiune și victimologie intrafamilială, Doctoral Thesis, Iași, University of Iași, 2008.
16. Bucharest. Web resource: <http://en.wikipedia.org/wiki/Bucharest>