

*The intergenerational transmission of domestic violence: An analysis of data from the Italian “Women Safety Survey” **

Isabella Corazziari[†] and Roberta Barletta[‡]

Summary. *The present work analyses some risk factors of domestic violence against women. In particular, the experience that childhood abuse either experienced directly or witnessed by women or their partners plays. Data comes from a wide victimization survey carried out by the Italian National Institute of Statistics, devoted to gathering data on acts of physical and sexual violence inflicted on women by partners and non partners. The analysis confirms the results from literature about re-victimization and intergenerational transmission of violence: experiences of physical or sexual violence in childhood inflicted by parents or close relatives, can be considered a risk factor for becoming a victim,(women), or a perpetrator,(men), of violence in later adult intimate relationships.*

Key words: *Intergenerational transmission, revictimization, domestic violence, childhood maltreatment, log-linear analysis*

In all of the most refined etiological models, negative experiences, such as abuses and maltreatments suffered in childhood, are considered important risk factors hampering a peaceful personal and relational growth. Cicchetti

* *Received: 17/01/2010 – Revision: 5/03/2010 – Accepted:24/1/2011*
Self-declaration of compliance with ethical standards: 5/03/2010

[†] ISTAT – Istituto nazionale di statistica:DISA/DCSA/SDS Servizio struttura e dinamica sociale, Viale Liegi, 13 – 00198 Roma, Tel. +39 06 4673 7246. E-mail: Isabella.Corazziari@istat.it.

[‡] ISTAT – Istituto nazionale di statistica DISA/DCSA/SDS Servizio struttura e dinamica sociale,Viale Liegi, 13 – 00198 Roma,Tel. +39 06 4673 7591. E-mail: Roberta.Barletta@istat.it.

Interdisciplinary Journal of Family Studies, XVII, 1/2011

and Rizley (1981), for example, classified such experiences as permanent vulnerability's factors increasing the risk of becoming a mistreating parent. The ecological model of Heise (1998) considers the exposure to childhood abuses and maltreatments as an important risk factor for domestic violence (*Intimate Partner Violence*). Many studies undertaken in very different contexts have shown higher rates of abuses among women whose partners had been victims of physical violence or had been witness of assaults against their mother in the family of origin (Hotaling and Sugarman 1986; Sugarman and Hotaling 1989; Stith et al. 2000; Coid et al. 2001; Martin et al. 2002). In this framework an interesting hypothesis is that of a real intergenerational transmission of the maltreatments. According to this, the child victim or witness of violence develops a very high risk of becoming a violent parent and/or partner in the adulthood (intergenerational transmission) or of becoming again victim within an intimate relationship characterised by violence (*revictimization*).

The theory of an intergenerational transmission of abuses is so often cited in the literature to gain the status of a self-evident truth, almost universally accepted. Notwithstanding, data giving statistical evidence to the theory are limited to study based on very few cases (*Case History Studies*), databases on selected populations with high risk (*Agency Record Study*), clinical studies or self-administered questionnaires submitted to adults identified as violent (*Self Report Studies*). All of the above studies gather retrospective data (*ex post facto*), and starting from cases of known and proofed violence, they record the highest percentages of history of maltreatments in the childhood, for example, by violent parents. The validity and the reliability of such studies is characterised by considerable methodological weaknesses. In particular, these studies seem to suffer from:

1. the use of small and not representative samples and the consequent impossibility to generalise survey results;
2. the absence of a control group, so that any causal interpretation of the study results has to be avoided;
3. utilization of not blinded observers with respect to the status of victim or abuser of the interviewee. This aspect increases the probability of *biased reporting*.

A recent review on studies published from 1996 to 2004 (Gil-González et al., 2008) on childhood experiences of violence in perpetrators as a risk factor of intimate partner violence, highlighted how most of these studies are not based on population representative samples, and being mainly cross sectional they gather retrospective data with a recall bias.

The aim of the present work is to analyse some risk factors of domestic violence using a representative survey. The issue of interest is violence against women, in particular the experience of abuses directly suffered or witnessed by the women or their partners during their respective childhood.

Data are from a wide victimization survey undertaken in 2006 by the Italian National Institute of Statistic (Istat, 2008), data published in 2008.

Methodology

The “Women Safety Survey” (Istat, 2008) is the first Italian survey on domestic violence, gathering data about physical and sexual violence inflicted to women both by partners and non partners.

The target population is women aged between 16teen and 70ty years, living in Italy. A sample of 25.000 women, representative of the target population at the national level and also for sub-regions have been interviewed by phone using the CATI (*Computer Assisted Telephone Interviewing*) technique. People were selected from the list of having a landline; sampling units are the telephone numbers belonging to the above list, stratified geographically (21 regions in Italy). First stage units are the phone numbers addresses recorded in the phone subscribers list, representing households randomly chosen in each defined strata.

Second stage units are eligible women: in each of the household selected in the first stage an individual is randomly selected among eligible people (women aged between 16teen and 70ty years).

The survey is focused on domestic violence defined as violence by a person with whom the woman has or has had an intimate relationship: husband, live-in partner, fiancé -“boyfriend”- or a man with whom the woman has or has had a relationship.

The physical violence is ranked from the less serious type to the most serious one, and data about it is gathered through the following questions:

Has your partner ever

- Threatened you to hit you physically?
- Thrown something at you or hit you with something that hurt or frightened you?
- Grabbed you or twisted your arm or pulled your hair in a way that hurt or frightened you?
- Slapped, kicked, bit or hit you with a fist?
- Tried to strangle you, suffocate you, burn you, or scald you on purpose?
- Used or threatened to use a knife or gun on you?
- Excluding sexual violence, has your partner ever been physically violent against you in a way not already mentioned?

In the survey, sexual violence is meant as all of those situations in which the woman is forced to actively make or to suffer different type of sexual actions against her own will. Survey questions on this topic are:

Has your partner ever

- Forced you to have a sexual intercourse, by threatening you, holding you down, or hurting you in some way?
- Attempted to force you into a sexual intercourse by threatening you, holding you down or hurting you in some way?
- Have you ever had a sexual intercourse with your partner even if you didn't feel like it, because you were afraid of his reaction?
- Force you to do some kinds of sexual act that you found degrading or humiliating?
- Forced you or attempted to force you into sexual activities with someone else, including being forced to have sex for money or for goods?
- Been sexually violent against you in a way that has not been already mentioned? (UNECE and UNDAW 2007).

The experiences of abuses during childhood are measured by the following questions:

- In your knowledge, was your father (or step-father, or mother's partner) ever violent against your mother?
- Was your father (or step-father, or mother's partner) ever physically violent against you before you turned 16?
- Was your mother (or step-mother, or father's partner) ever physically violent against you before you turned 16?
- Before you were aged 16, did anybody ever force or attempt to force you into any sexual activity?

Some of the previous questions are asked to the woman interviewed also referring to the present or former partner, if she has one or has had a violent one:

- In your knowledge, was your current partner father or step-father ever violent against his wife or other women living with him?
- To the best of your knowledge, were your partner's parents ever violent against him?

In the present work, two sets of model will be analysed, the first concerns the woman, while the latter deals with her partner.

In the first set of models, the association between being (or being not) victim of violence by partner, and possible violent events by her family of origin is addressed and analysed. Violence by the partner is distinguished in several types, such as threats, physical violence without threat, both physical violence and threat, sexual violence, both sexual and physical violence. Violent events by the family of origin include both physical violence directly

suffered and/or witnessed by the woman and other sexual abuses suffered by the woman before 16teen by any author.

In the second set of models, the association between being (or being not) a perpetrator of different types of violence against the woman and possible violent events suffered by the partner in his family of origin is analysed. Violent events from the family of origin include physical violence directly suffered and/or witnessed by the partner himself, according to what is reported by the interviewed woman. In this male model the childhood experience is considered as a possible risk factor on the response variable (violence by the partner, the same used in the female model). The response variable is considered as an indicator of the risk for the partner to be author of domestic violence.

Results

The main outcomes of the ISTAT survey show that in Italy 2 million and 938 thousand women aged between 16 and 70 years old - the 14,3 per cent of women that have or have had a partner – have suffered during the relationship or after its end at least one event of physical or sexual violence by the husband, live-in partner or fiancé.

For both sets of models, a log-linear specification (see for example Agresti, 2002, Chapter 8) has been assumed. The models also include socio-demographic variables, such as area of residence, woman age, educational level and marital status at the time of the interview.

Such controlling variables have been used firstly as stratification variables in the sample design and then to obtain post-stratifying weights (Deville and Sarndal, 1992). Moreover, the two sets of models includes variables on partner drinking behaviour, as a further risk factor of domestic violence.

Main advantages are ensued by adopting such models. First of all, they are specific for the analysis of multi-way contingency tables. The object of the inference is therefore the joint frequency of the set of variables considered important for the research, without considering any of them as explicative of the others. Furthermore, the dependence, independence and conditional independence of more than two variables can be adequately studied..

The possibility of stratifying data according to some variables to be controlled for, introduces a sort of asymmetry in the models, focusing on the associations of variables of direct interest (variables about violence experiences in the present work) and controlling for the others.

The risk of violence model for the woman

Three models were studied for the woman, considering three definitions of the perpetrator for the variable related to sexual abuses suffered by the

woman before her 16teen: any author, only relatives, only close relatives (as parents, grand-fathers/mothers or uncles).

The variable referring to the possible experiences of partner violence has the following modalities: no violence, only threats of violence, only physical violence with no threat, both physical and threats, only sexual violence, both physical and sexual violence.

In a first preliminary analysis violence by partner included among the victims also women having suffered only unwanted or humiliating sexual intercourses with the partner. In the preliminaries analysis all the three models distinguished by the definition of the variable about the women sexual abuses suffered before her 16teen, have shown a strong positive association between variables referred to violence suffered or witnessed in childhood and some of the modalities indicating the type of violence by partner (actual or ex partner). The association is with the modalities ‘only threat of physical violence’, ‘both threats and physical violence’, ‘only sexual violence’.

Excluding from the computation of the victims of partner violence, those women reporting only humiliating and/or unwanted sexual intercourses with the partner, both parameter estimates and their statistical significance increase. The corresponding outcomes are discussed in this work.

In the first model (Table 1), considering any author of childhood sexual abuses, the estimates increase their precision with respect to the corresponding preliminary model, and the association between being victim by partner (actual or ex) and having suffered physical or sexual violence when she was a child or having been a witness of violence by father against the mother in childhood, is evident. Indeed both the parameters referring to childhood abuses and the ones referring to partner’s threat or sexual violence have negative values. The parameter referring to no experiences of domestic violence by partner is positive instead (3.00).

Table 1- Model 1: Any author of sexual violence before 16teen

Parameter		Estimate	Standard error	Chisquare	Pr > Chisquare
sexual abuses before 16teen	Yes	-1.2711	0.0273	2171.02	<.0001
father violent against her	Yes	-1.4211	0.0312	2076.97	<.0001
mother violent against her	Yes	-1.6997	0.0391	1885.32	<.0001
father violent against mother	Yes	-1.2024	0.0265	2056.2	<.0001

Table 1- continued

Parameter		Estimate	Standard error	Chisquare	Pr > Chi square
violence by partner	no violence	3.0038	0.0474	4018.9	<.0001
violence by partner	only threat	-1.2011	0.1145	110.05	<.0001
violence by partner	only physical without threat	0.4664	0.0672	48.24	<.0001
violence by partner	both physical and threat	0.1662	0.072	5.32	0.021
violence by partner	only sexual without physical	-1.9638	0.1647	142.2	<.0001
partner abuse of alcohol	actual partner overindulges in drink	-0.3101	3.8167	0.01	0.9352
partner abuse of alcohol	actual partner does not overindulges in drink	2.2375	3.8161	0.34	0.5577
baseline:	sexual abuses before 16teen	No			
	father violent against her	No			
	mother violent against her	No			
	father violent against mother	No			
	violence by partner	only sexual violence			
	partner abuse of alcohol	not pertinent			

partner means actual or ex

The variable related to the alcohol abuse by partner is not significant in the definition of the overall model. It is difficult to conclude that alcohol abuse has no influence on the risk of a partner violent behaviour against the woman. The lack of significance can be a problem of variable definition. Indeed the model refers to victims by the actual or the ex partner. The abuse of alcohol is asked to all the women having a partner at the time of the interview, be their partner violent or not, so allowing a study of risk, having observed the alcohol abuse behaviour in both case (victims) and controls (no victims). While in the case of ex partners, the alcohol abuse was asked only if they has been violent against the woman. So the alcohol abuse variable is not fully coherent in the model. This could be the reason why it is not significant and can introduce instability in the model for other parameters,

especially those related to the stratification variables. Eliminating the variable does not change the other parameters values and standard errors.

Two further models have been obtained specifying the sexual violence suffered by the woman before 16teen according to perpetrators: in the second model (Table 2) the author of sexual violence before 16teen is a relative, and in the third model a close relative (parents, adoptive parents, brothers, sisters, uncles, grandfather/mother) (Table 3). The variable related to alcohol abuse by partner was not included for the above reasons discussed for model 1.

Table 2 - Model 2: Author of sexual violence before 16teen = a relative

Parameter		Estimate	Standard error	Chisquare	Pr > Chi square
sexual abuses before 16teen by a relative	Yes	-2.1724	0.0617	1241.13	<.0001
father violent against her	Yes	-1.4178	0.031	2091.87	<.0001
mother violent against her	Yes	-1.6995	0.0391	1889.79	<.0001
father violente against mother	Yes	-1.2013	0.0265	2061.07	<.0001
violence by partner	no violence	3.0013	0.0473	4028.76	<.0001
violence by partner	only threat	-1.2026	0.1142	110.87	<.0001
violence by partner	only physical without threat	0.4682	0.067	48.87	<.0001
violence by partner	both physical and threat	0.1615	0.072	5.04	0.0248
violence by partner	only sexual without physical	-1.969	0.1647	142.93	<.0001
baseline:	sexual abuses before 16teen by a relative	No			
	father violent against her	No			
	mother violent against her	No			
	father violente against mother	No			
	violence by partner	only sexual violence			

partner means present or ex

Table 3 - Model 3: Author of sexual violence before 16teen= a close relative

Parameter		Estimate	Standard error	Chisquare	Pr > Chisquare
sexual abuses before 16teen by a strict relative	Yes	-2.5256	0.0881	822.63	<.0001
father violent against her	Yes	-1.4178	0.031	2091.87	<.0001
mother violent against her	Yes	-1.6995	0.0391	1889.79	<.0001
father violent against mother	Yes	-1.2013	0.0265	2061.07	<.0001
violence by partner	no violence	3.0013	0.0473	4028.76	<.0001
violence by partner	only threat	-1.2026	0.1142	110.87	<.0001
violence by partner	only physical without threat	0.4682	0.067	48.87	<.0001
violence by partner	both physical and threat	0.1615	0.072	5.04	0.0248
violence by partner	only sexual without physical	-1.969	0.1647	142.93	<.0001

baseline:	sexual abuses before 16teen by a relative	No
	father violent against her	No
	mother violent against her	No
	father violent against mother	No
	violence by partner	only sexual violence

partner means present or ex

First the effects of the stratifying and post-stratifying variables on the response ones (violence by partner, childhood experiences of abuses and maltreatments) will be discussed, and then the association among the response variables.

The results of the three models for the stratifying variables (the geographical ones) and the post-stratifying ones (age classes, educational level, marital status and typology of the woman family) will be discussed in term of odds-ratio with respect to the baseline odds (the odd is the rate between the frequency of an event and that of the complementary one, having fixed all the other intervening variable). The baseline of each model

is the group of women that are widows, aged more than 64 years, with an educational level equal or less than the primary school, living in the two great isles of Italy (Sicily or Sardinia), in municipalities with more than 50.000 inhabitants, in families with more than 4 members. To obtain an odds ratio referred to another baseline, the initial one is to be divided by the corresponding odds-ratio of the new desired baseline: for example to compare odds between the North-West area and the North-East for the variable victim of sexual violence before 16teen, the corresponding odds-ratio in the table for north-west and North-east are to be rated each other, with the first as the numerator and the second as the denominator.

In all the three models it is evident that violence is a rare phenomenon, both violence by partner and violence suffered in childhood directly or indirectly as a witness. All the corresponding odds (first line in tables 4, 5 and 6) are less than 1, while the category 'no violence' is higher than 1. When selecting the perpetrators of sexual violence suffered by the interviewed woman before 16teen (any author, only relatives, only close relatives), the odds of non victims with respect to victims increase from 13 to 77 for relatives, to 156 in the case of close relatives.

From the table 4 (model 1: any author of sexual violence before 16teen) some social demographic characteristics of the woman increases the frequency of being victims by partner or victims in childhood. In particular, the item marital-status=separated/divorced is more often associated to experiences of violence. On the contrary married women present an inverse pattern. Also living in families with at least three or four components decreases the association with experiences of violence with respect to other family's types.

Table 4 - Odds ratio for Model 1

name of odds	sexual abuses before 16teen				by partner						
	father violent against her	mother violent against her	father violent against mother	no violence	only threat	only physical without threat	both physical and threat	only sexual without physical	both physical and sexual violence		
base odd	0.08	0.06	0.03	0.09	5.25	0.01	0.07	0.05	0.01	0.03	
Marital status-Single	0.93	0.69	0.72	0.72	1.39	0.64	0.81	0.60	1.46	0.74	
Marital status-Married	0.82	0.77	0.87	0.89	1.88	0.68	0.65	0.50	0.77	0.37	
Marital status-Divorced-legally separated	1.39	1.88	1.76	1.44	0.28	1.95	2.23	3.35	0.98	3.85	

Table 4 - continued

name of odds	sexual	father	mother	father	by partner					
	abuses before 16teen	violent against her	violent against her	violent against mother	no violence	only threat	only physical without threat	both physical and threat	only sexual without physical	both physical and sexual violence
base odd	0.08	0.06	0.03	0.09	5.25	0.01	0.07	0.05	0.01	0.03
Educational level- Degree	1.65	1.12	1.25	0.84	0.75	1.35	1.13	1.56	1.30	1.15
Educational level- Secondary school	1.30	1.00	1.12	0.97	0.87	1.01	1.14	1.18	1.17	1.07
Educational level- Primary school	0.98	1.03	0.93	1.11	1.05	1.00	0.97	0.93	1.05	0.91
Age-16-24	0.47	0.82	0.71	0.59	0.91	1.09	1.08	1.14	1.48	0.95
Age-25-29	0.65	0.93	1.07	0.82	0.88	1.22	1.17	1.25	0.58	0.81
Age-30-34	0.85	1.11	0.84	1.17	0.76	1.27	1.23	1.46	1.09	1.05
Age-35-39	1.05	1.05	1.00	1.26	0.91	0.88	1.13	1.07	1.15	1.07
Age-40-44	1.43	1.13	0.85	1.14	0.89	1.11	0.84	1.21	1.42	1.49
Age-45-49	1.45	1.24	1.01	1.30	0.94	1.15	0.96	1.08	1.20	1.16
Age-50-54	1.29	1.23	1.19	1.08	1.05	0.94	1.02	0.90	0.72	0.98
Age-55-59	1.35	0.97	1.23	1.11	1.05	1.10	0.88	0.92	0.78	1.19
Age-60-64	1.16	0.95	1.20	0.94	1.14	0.67	0.93	0.86	1.18	0.88
Family type-single < 50	1.13	1.92	2.60	1.17	0.83	1.95	0.85	1.47	1.10	1.12
Family type- single>=50	1.02	0.94	0.80	1.03	1.02	1.04	1.05	0.81	1.61	0.96
Family type-2 comp	1.00	0.96	0.98	1.06	0.95	0.99	1.10	0.94	1.02	1.18
Family type-3 comp	0.82	0.86	0.84	0.91	1.00	0.91	1.04	0.98	0.85	1.02
Family type-4 comp	0.96	0.83	0.90	0.96	1.09	0.78	0.99	0.95	0.94	0.79

In details, divorced women with at least a secondary educational degree, aged between 40ty and 59 years, are more frequently victims of sexual violence before 16teen. Younger women (less than 30 years old), married women and women living in families of three members (probably families formed by the parents and their son), are more frequently no victims. Divorced women have more frequently been victims in childhood both as witnesses and as direct victims by father and mother. The same women are also more frequently victims of violence by partner.

Considering the models 2 and 3 respectively with relatives and close relatives as authors of violence before 16teen, odds ratio change only for this variable (violence before 16teen) and not for the other variables of violence

(childhood violence in family of origin and domestic violence by partner)
(see table 5 for model 2 and table 6 for model 3).

Table 5 - Odds ratio for Model 2

name of odds	sexual	father	mother	father	by partner					
	abuses before 16teen	violent against her	violent against her	violent against mother	no violence	only threat	only physical without threat	both physical and threat	only sexual without physical	both physical and sexual violence
base odd	0.01	0.06	0.03	0.09	5.23	0.01	0.07	0.05	0.01	0.03
Marital status- Single	1.24	0.68	0.72	0.71	1.40	0.64	0.80	0.60	1.46	0.74
Marital status- Married	0.84	0.77	0.86	0.88	1.88	0.69	0.64	0.50	0.77	0.37
Marital status- Divorced-legally separated	1.41	1.86	1.78	1.44	0.28	1.94	2.23	3.36	0.98	3.83
Educational level- Degree	1.30	1.11	1.25	0.84	0.75	1.35	1.13	1.55	1.30	1.14
Educational level- Secondary school	1.40	0.99	1.11	0.97	0.87	1.02	1.14	1.17	1.17	1.07
Educational level- Primary school	1.12	1.04	0.94	1.11	1.05	1.00	0.97	0.93	1.05	0.91
Age-16-24	0.27	0.82	0.73	0.59	0.90	1.11	1.08	1.14	1.49	0.94
Age-25-29	0.78	0.93	1.05	0.82	0.88	1.22	1.18	1.25	0.59	0.81
Age-30-34	0.99	1.14	0.84	1.19	0.76	1.27	1.23	1.46	1.09	1.09
Age-35-39	1.33	1.04	1.01	1.26	0.91	0.88	1.13	1.08	1.15	1.07
Age-40-44	1.56	1.12	0.85	1.14	0.89	1.11	0.84	1.21	1.42	1.50
Age-45-49	1.55	1.26	1.01	1.32	0.94	1.19	0.96	1.09	1.19	1.15
Age-50-54	1.40	1.23	1.18	1.08	1.05	0.94	1.02	0.89	0.72	0.98
Age-55-59	1.18	0.97	1.24	1.11	1.05	1.09	0.88	0.92	0.78	1.18
Age-60-64	1.24	0.94	1.20	0.93	1.15	0.66	0.93	0.85	1.18	0.88
Family type-single < 50	0.75	1.96	2.55	1.16	0.82	1.93	0.85	1.46	1.09	1.17
Family type- single>=50	1.32	0.92	0.79	1.02	1.02	1.06	1.05	0.81	1.61	0.95
Family type-2 comp	1.26	0.96	0.99	1.07	0.95	1.01	1.10	0.94	1.03	1.16
Family type-3 comp	0.91	0.87	0.85	0.91	1.00	0.91	1.04	0.99	0.85	1.01
Family type-4 comp	0.89	0.82	0.90	0.96	1.09	0.77	0.99	0.95	0.94	0.78

Table 6 - Odds ratio for Model 3

name of odds	sexual abuses before 16teen	father violent against her	mother violent against her	father violent against mother	by partner					
					no violence	only threat	only physical without threat	both physical and threat	only sexual without physical	both physical and sexual violence
base odd	0,01	0,06	0,03	0,09	5,23	0,01	0,07	0,05	0,01	0,03
Marital status-Single	1,37	0,68	0,72	0,71	1,40	0,64	0,80	0,60	1,46	0,74
Marital status- Married	0,87	0,77	0,86	0,88	1,88	0,69	0,64	0,50	0,77	0,37
Marital status- Divorced-legally separated	1,47	1,86	1,78	1,44	0,28	1,94	2,23	3,36	0,98	3,83
Educational level- Degree	1,18	1,11	1,25	0,84	0,75	1,35	1,13	1,55	1,30	1,14
Educational level- Secondary school	1,42	0,99	1,11	0,97	0,87	1,02	1,14	1,17	1,17	1,07
Educational level- Primary school	1,03	1,04	0,94	1,11	1,05	1,00	0,97	0,93	1,05	0,91
Age-16-24	0,34	0,82	0,73	0,59	0,90	1,11	1,08	1,14	1,49	0,94
Age-25-29	0,67	0,93	1,05	0,82	0,88	1,22	1,18	1,25	0,59	0,81
Age-30-34	1,17	1,14	0,84	1,19	0,76	1,27	1,23	1,46	1,09	1,09
Age-35-39	1,26	1,04	1,01	1,26	0,91	0,88	1,13	1,08	1,15	1,07
Age-40-44	1,76	1,12	0,85	1,14	0,89	1,11	0,84	1,21	1,42	1,50
Age-45-49	1,65	1,26	1,01	1,32	0,94	1,19	0,96	1,09	1,19	1,15
Age-50-54	1,17	1,23	1,18	1,08	1,05	0,94	1,02	0,89	0,72	0,98
Age-55-59	1,22	0,97	1,24	1,11	1,05	1,09	0,88	0,92	0,78	1,18
Age-60-64	1,19	0,94	1,20	0,93	1,15	0,66	0,93	0,85	1,18	0,88
Family type-single < 50	0,56	1,96	2,55	1,16	0,82	1,93	0,85	1,46	1,09	1,17
Family type- single>=50	2,07	0,92	0,79	1,02	1,02	1,06	1,05	0,81	1,61	0,95
Family type-2 comp	1,33	0,96	0,99	1,07	0,95	1,01	1,10	0,94	1,03	1,16
Family type-3 comp	0,86	0,87	0,85	0,91	1,00	0,91	1,04	0,99	0,85	1,01
Family type-4 comp	0,79	0,82	0,90	0,96	1,09	0,77	0,99	0,95	0,94	0,78

In the second model, women aged 35-54 have the highest frequency of victimization for sexual violence before 16teen by relatives. When considering the same type of violence by close relatives (model 3) the age class of the group with higher frequency of victimization for sexual violence before 16teen restricts (40-49 years). Maybe in this last model the effect of older age-classes (more than 49 years) on the ‘before 16teen sexual violence’ variable is absorbed in the modality of the type of family ‘single woman with more than 50 years old. This last consideration can suggest that the women victims of sexual violence before 16teen by close relatives could find harder difficulties in realising a project of a family when adults, having

suffered in their own family of origin physical, sexual and psychological injuries, that can feed feeling of severe diffidence towards the other people.

Focusing on the association among the response variables, the size and sign of model parameters suggests the following considerations.

In all of the three models, having been victim of any form of violence in childhood results as a very strong predictor of both sexual and physical violence by partner, once adult.

In model 1, considering any author of sexual violence suffered before 16teen (not known author, known author and relatives), the highest risk factors of becoming a victim of domestic violence by partner (only sexual in particular) are, in a decreasing strength of association, the experience of physical violence by the mother, by the father, sexual violence suffered before 16teen and, finally, to have been witness of violence by father against her mother (all the corresponding parameters are of negative sign as the ones of the violence by partner, relative to sexual violence, only threats, both physical and sexual, the last one obtained as the negative of the sum of the five parameters of violence by partner).

In models 2 and 3, obtained by specifying as authors of the sexual violence before 16teen respectively relatives and close relatives, such variable is main predictor for both physical and sexual violence by partner, when the woman is adult. The other factors relative to the other types of violence suffered by the woman in the family of origin maintain the same ranking each other as in the first model. These models clearly indicate that the direct experience of some type of violence in the family of origin increases the probability to be victim of domestic violence when adult (re-victimization). While the experience of witnessing violence by father against the mother in childhood is not predictive of violence by partner once adult.

The risk of violence model for the partner

For a deeper understanding, a further model for the risk of violence has been considered for the present partner of the interviewed woman. Among the response variables, the experiences of violence suffered by the partner when he was a child in his family of origin both as a victim and as a witness has been considered. As aforementioned, when considering variables for the partner, his violence experiences are reported by the interviewed woman. Consequently, some distortion is probable.

The response variable indicating a violent behaviour of the partner against the woman, is the one indicating if the interviewed woman has been victim of any of the type of violence by partner indicated above. The point of view is overturned: such variable is read as an indicator of the risk that the partner be violent against the woman.

Both the two variables on violence by partner were considered: firstly including from the counting of victims women reporting only humiliating or not-wanted sexual intercourses with the partner and finally excluding them.

In the partner model other potential risk factors of becoming or being a violent partner, are considered: the variable related to alcohol abuses (for the case of the present partner it is always asked to the interviewed woman, be him a violent partner or not) and a variable indicating whether the partner has ever had a violent behaviour (verbal or physical) against unrelated persons. Some social demographic characteristics of the partner have not been inserted, as his age, where he has lived during his early teens, if in Italy or abroad, his educational level. This is due to a preliminary analysis on the association between each of the above variables and the indicator of violence by partner, resulting not relevant.

In the partner model, the stratifying variables related to the sample design and to the post-stratification (that is the same used in the woman models) have been considered due to methodological reasons.

In the first model considering as victim of sexual violence also women having reported only humiliating or not wanted sexual intercourses (Table 7), a significant association among the variable depicting the violent behaviour of the partner against the woman and the variables related to the violence he has suffered in his family of origin, both as a direct victim and as a witness, has been found. This outcome suggests, as in the previous analysis, some sort of intergenerational transmission.

Table 7 - Partner Model 1 (present partner)

Parameter		Estimate	Standard error	Chisquare	Pr> Chisquare
violence by partner	no violence	5.4344	0.1184	2108.4	<.0001
violence by partner	only threat	-3.2147	0.5659	32.27	<.0001
violence by partner	only physical without threat	1.6338	0.2953	30.6	<.0001
violence by partner	both physical and threat	0.9079	0.1735	27.38	<.0001
violence by partner	only sexual without physical	-1.66	0.2658	39.01	<.0001
Parents violent against partner	Yes	-1.7088	0.084	414.03	<.0001
Partner father violence against mother	Yes	-1.7846	0.1013	310.05	<.0001
Partner drinking	Partner getting drunk	-1.2748	0.0637	400.83	<.0001
problems outside family	Yes violent outside the actual family	-1.1419	0.053	463.97	<.0001

Table 7 - continued

baseline:	violence by partner	only sexual violence
	Parents violent against partner	No
	Partner father violent against mother	No
	Partner drinking problems outside family	No, do not know
		No, do not know

It is interesting to note that when focusing on the association between partner’s experiences of childhood abuses/maltreatments and his present violent behaviour against the woman, the risk of being violent against the woman is most related to being witness of violence from his father against his mother when he was a child.

Variables indicating partner abuses of alcohol or whether he has had violent behaviours against unrelated persons, have significant positive association with he being violent, both physically and sexually, against the woman (Table 8).

Table 8 - Odds ratios for partner Model 1 (present partner)*

nomiodds odds base	parents violent against partner	Partner father violent against mother	no violence	only threat	Partner violence				Partner drinking	Partner problems outside family
					only physical without threat	both physical and threat	only sexual without physical	both physical and sexual violence		
	0,033	0,028	29,089	0,000	0,022	0,011	0,001	0,000	0,078	0,102
RIP-North West	0,981	0,866	1,072	1,964	0,885	1,015	0,968	0,987	1,035	1,026
RIP-North East	1,322	1,177	1,066	1,333	0,962	0,876	1,116	0,773	1,432	1,044
RIP-Centre	1,125	1,290	0,802	1,181	1,224	1,296	1,101	0,910	0,655	1,127
RIP-South	0,809	0,932	0,898	1,106	1,152	1,023	1,142	1,352	0,898	1,025
Municipality-Metropolitan centre	1,058	1,056	0,785	0,884	1,272	1,280	1,145	0,968	0,687	1,050
Municipality-Metropolitan periphery	1,157	1,028	0,926	0,965	1,013	1,230	0,887	1,028	0,567	1,126
Municipality-less than 2000 inhabitants	1,121	1,169	1,030	0,823	0,990	0,932	1,091	0,675	1,990	0,996
Municipality-2001-10000 inhabitants	0,900	0,980	1,235	0,968	0,785	0,846	1,025	1,006	1,486	0,885
Municipality-10001-50000 inhabitants	0,979	0,961	1,099	1,354	0,904	0,916	0,892	1,140	0,966	0,966

**Only commented parameters reported. Some parameters missing due to redundancy*

The abuse of alcohol seems to be a more important risk factor for violence against the woman than violent behaviours against unrelated persons, especially in metropolitan centres (parameter stratified by controlling variables not shown here). The inverse is true in small municipalities where violent behaviours against unrelated persons are instead more important risk factors for partner violence against the woman.

In the second model obtained excluding from the count of victim of sexual violence women that reported only unwanted or humiliating sexual intercourses with their partner, the parameter referred to partner sexual violence against the woman increases very much in absolute value, and it is strongly positively associated with the indicators of violence suffered by the partner in his childhood (see Table 9).

Table 9 - Partner Model 2 (present partner)

Parameter		Estimate	Standard error	Chisquare	Pr> Chisquare
violence by partner	no violence	6,5342	0,2923	499,77	<.0001
violence by partner	only threat	-1,9425	0,5361	13,13	0,0003
violence by partner	only physical without threat	2,7626	0,1793	237,32	<.0001
violence by partner	both physical and threat	2,1979	0,3955	30,88	<.0001
violence by partner	only sexual without physical	-5,898	0,3576	272,05	<.0001
Parents violent against partner	Yes	-1,7088	0,084	414,03	<.0001
Partner father violence against mother	Yes	-1,7846	0,1013	310,05	<.0001
Partner drinking	Partner getting drunk	-1,2748	0,0637	400,83	<.0001
problems outside family	Yes violent outside the actual family	-1,1419	0,053	463,97	<.0001
baseline:	violence by partner		only sexual violence		
	Parents violent against partner		No		
	Partner father violence against mother		No		
	Partner drinking		No, do not know		
	problems outside family		No, do not know		

In the second model odds-ratios about the risk that the partner is author of only sexual violence and at a fewer extent of both sexual and physical violence, increase very much in each single sub-population defined by the stratification and post-stratification variables. In particular the risk that the partner be a perpetrator of sexual violence against the woman is higher in the subpopulation of single women (odds ratio higher than 65) and women aged between 35 and 54 years (Table 10) with respect to the corresponding odds ratio for the previous model (Table 8).

Table 10 – Odds ratios for partner Model 2 (present partner)*

nomiodds	Partner violence									
	parents violent against partner	Partner father violent against mother	no violence	only threat	only physical without threat	both physical and threat	only sexual without physical	both physical and sexual violence	Partner drinking	Partner problems outside family
odds base	0.033	0.028	27.510	0.000	0.023	0.013	0.000	0.000	0.078	0.102
RIP-North West	0.981	0.866	1.024	1.854	0.918	1.066	0.837	0.719	1.035	1.026
RIP-North East	1.322	1.177	1.116	1.412	0.940	0.816	0.889	0.822	1.432	1.044
RIP-Centre	1.125	1.290	0.822	1.276	1.210	1.214	0.810	0.703	0.655	1.127
RIP-South	0.809	0.932	0.854	1.162	1.184	1.140	1.031	1.243	0.898	1.025
Municipality-Metropolitan centre	1.058	1.056	0.811	1.027	1.220	1.248	0.269	0.770	0.687	1.050
Municipality-Metropolitan periphery	1.157	1.028	0.939	1.077	1.045	1.097	1.497	0.954	0.567	1.126
Municipality-less than 2000 inhabitants	1.121	1.169	1.109	0.711	0.942	0.839	2.323	0.955	1.990	0.996
Municipality-2001-10000 inhabitants	0.900	0.980	1.190	0.921	0.799	0.916	1.320	0.976	1.486	0.885
Municipality-10001-50000 inhabitants	0.979	0.961	1.054	1.174	0.926	0.985	1.156	1.224	0.966	0.966
Marital status-Single	0.754	0.859	0.908	1.462	1.299	0.700	65.419	11.157	1.712	1.130
Educational level-Degree	1.139	0.963	0.647	1.419	1.152	2.202	0.754	1.071	0.816	1.400
Educational level-Secondary school	1.032	0.960	0.907	1.018	1.088	1.123	1.353	1.072	0.867	1.274
Educational level-Primary school	0.943	1.014	1.051	1.100	0.985	0.892	1.048	1.070	1.087	0.982
Age-30-34	1.048	1.100	0.981	1.203	0.980	1.082	1.852	1.887	1.274	0.953
Age-35-39	0.857	1.132	0.890	0.776	1.123	1.123	3.315	1.291	0.753	0.931
Age-40-44	1.196	1.310	0.979	0.584	0.856	1.309	5.658	3.912	0.881	0.941
Age-45-49	1.110	1.203	0.891	0.928	1.032	1.269	4.456	3.116	0.857	0.901
Age-50-54	0.962	1.146	0.826	0.949	1.161	1.281	3.436	3.344	0.805	0.998
Age-55-59	1.137	1.268	0.816	1.071	1.083	1.456	4.749	3.381	0.752	1.036
Age-60-64	1.043	0.798	0.734	0.559	1.332	1.396	13.685	3.327	1.006	1.036

*Only commented parameters reported. Some parameters missing due to redundancy

Table 10 – continued*

nomi odds	Partner violence									
	parents violent against partner	Partner father violent against mother	no violence	only threat	only physical without threat	both physical and threat	only sexual without physical	both physical and sexual violence	Partner drinking	Partner problems outside family
odds base	0.033	0.028	27.510	0.000	0.023	0.013	0.000	0.000	0.078	0.102
Family type-2 comp	1.053	1.131	0.990	2.507	1.059	0.897	1.180	2.537	1.033	0.963
Family type-3 comp	1.115	1.187	0.917	2.422	1.102	1.038	1.328	2.678	0.887	1.084
Family type-4 comp	1.038	1.153	0.888	2.326	1.049	1.232	0.851	1.929	0.970	1.003

*Only commented parameters reported. Some parameters missing due to redundancy

The risk that the partner be sexually and physically violent against the woman is higher for women living in households with at least two members; for such households also the risk of only threat of physical violence by partner is higher. The two indicators of physical violence, with and without threats, are higher in the subpopulation of women living in metropolitan centres, while the indicator of sexual violence by the partner is higher in the subpopulation of women living in municipalities with less than 2000 inhabitants.

Focusing on the association among response variables, the model shows a very high positive association between the violence the partner has directly suffered or witnessed in his family of origin, and the risk that he is a violent partner, especially regarding the sexual violence both with and without the physical one. The association is higher when considering the violence the partner has seen from his father against his mother.

Discussion

In the present work the main focus is on the intergenerational transmission of violence. The topic is studied considering the association between the violence experienced in childhood and the violence experienced in adulthood both as a victim for the woman (revictimization) and as a perpetrator for the partner. In more details, when considering the woman, the association between experiences of physical and/or sexual violence suffered in her childhood (within her family of origin or from other authors) and experiences of physical and/or sexual violence suffered by her partner when adult has been studied. When considering the partner, the association between physical violence directly suffered or witnessed when he was a child in his family of origin and the fact that he be violent against his partner when adult has been addressed. Although structural territorial and social-demographic variables were included in the discussed models, the outcomes about the associations among structural variables and the variable of

violence from the partner will be discussed in more details elsewhere in another work.

The present work constitutes a partial study of the whole phenomenon of domestic violence, as it does not address the aspect of revictimization with regard to the man and of inter-generational transmission of violence with regard to the woman.

The limit is implicit in the aims of the Istat Safety of women survey. Indeed Istat survey is addressed to a female sample and specifically devoted to survey the phenomenon of violence against women.

Although the phenomenon of mutual violence within an intimate relationship and of revictimization also in the case of men be not small, it is widely recognised by sociologists and psychologists that women are the preferential victims of violence and that *the* social problem is violence against women and violence against children.

Recently theorists have suggested that the intergenerational transmission of violence may operate differently for men and women. The effect of growing up in a violent home will be more strongly related to becoming a perpetrator of spouse abuse for men than it will be for women. Instead, growing up in a violent home will be related more strongly to becoming a victim of spouse abuse for women than it will be for men (Stith et al., 2000).

Then, considering the analysis for the woman, the outcomes seem to confirm results stated in many published studies about re-victimization: experiences of physical or sexual violence in childhood by parents or close relatives can be considered as a risk factor for the woman being victim of both physical and sexual violence by the partner, once adult. So re-victimization, that is the probability to be victim in adult age by the partner, is higher for women that were also victims in the childhood. Witnessing domestic violence in the family of origin is also related to being victim from the partner once adult, but the most important risk factor of re-victimization is violence directly suffered in childhood by parents or close relatives.

The models referred to the man as a potential perpetrator of violence, seem to confirm the hypothesis of an intergenerational transmission of the violence. There is a very strong association between the experience of violence directly suffered or witnessed in childhood by the man and the fact that he becomes a violent partner. The association in these models is stronger with the variable of witnessing his father violence against his mother. This data is consistent with other published results (Hotalig and Sugarman, 1986), suggesting that witnessing violence in one's family of origin is the most consistent risk factor for men behaving aggressively in intimate relationships, once adult.

The interpretation of these strong associations is ticklish. First we need to underline that even though data confirm the association between violence in childhood and then in adulthood, it can not be considered as a cause-effect relation. It is a methodological problem, common to all the studies based on

observational data. Indeed data used in the present work are from a cross-sectional survey, not allowing causal-effect interpretation without strong and not widely accepted assumptions (Holland, 1986; Dawid, 2000). Furthermore in the above models many relevant variables were not considered, as indicators of the relation with parental models for example.

It is plain that not all the women having suffered violence before 16teen become victims by partner once adult, and not all the victims of domestic violence by partner have been victims in the childhood. Similarly, not all the men directly victims or witnessing violence in their family of origin, become violent partners in adulthood, and not all violent partners have experienced childhood abuses and maltreatments in their family of origin.

Nevertheless early experiences of abuses and maltreatments can be considered as stressing and vulnerability factors increasing the risk of future experiences of violence.

Some explicative models of re-victimization, for example, consider symptoms of Post Traumatic Stress Disorders and dissociation both as causes and consequences of such severe experiences.

According instead to social learning theory, that provides a theoretical rationale for understanding how domestic violence is transmitted intergenerationally, children learn through direct behavioural conditioning and by imitating the behaviour they have observed or seen reinforced in others:

“Children who grow up in families in which they witness interparental violence or experience child abuse are more likely to imitate or tolerate these behaviours than are children from non violent homes” (Stith et al., 2000, p. 640).

Pollack (2004) proposes a model for the intergenerational cycle of violence in which behavioural strategies and scripts are transmitted from parents to children. Even in this case it has to be underlined that witnessing or experiencing domestic violence in the family of origin is not an inexorable precursor of violence, but it does increase the likelihood of violence.

The consequence of early adversities is a sort of vulnerability and not necessarily a definitive inability. There are many other important factors to be considered, that can act increasing the risk or, on the contrary, as protective factors breaking the cycle of violence. The final and real risk is a cumulative one, resulting from a long chain of indirect connections. No negative experience is conclusive by itself, but each one produces a series of circumstances increasing the likelihood of the occurrence of a further negative experience.

Conclusions

The outcomes discussed above from the “Safety of Women Survey” are very useful as they allow confirming some important hypothesis about risk

factors of domestic violence, both from the woman point of view and for the men one. Data for the analysis about men are reported by the woman and not directly gathered.

The present study provides valuable results from a sample representative at National level and also for sub-regions; it is not a case-study, nor data are based only on selected groups as the ones of victims or the ones of perpetrators. The sample is random and victims are not known a priori, so the problem of *biased reporting* is limited. This fact allows the study of the variables gathered in the survey in terms of risk factors, with a sort of cases compared with controls, and results can be generalised, at least to the Italian situation.

Data are from a cross-sectional survey and are retrospective, so they can be biased by the problem of lack of memory. As information about domestic violence used in the present study, refer to the whole life of the interviewed woman, they are not affected by telescoping – forward or backward - biases (Schneider and Sumi, 1981). They can be affected by problems of forgetting the whole event. For some people forgetting traumatic events can be a defensive strategy, but the whole of the questionnaire used in the survey was planned and studied to help in discovering such traumatic events in the life of the woman. Furthermore such traumatic events can be hardly forgotten. The final choice to refer to events over all the long-life of the interviewed people should avoid memory biases.

For violence before 16teen some telescoping effects, both backward than forward, could be found, but considering the importance and burden of such traumatic events for a girl and her future life, have the events occurred when she was 15teen or 17teen instead of 16teen, makes no relevant difference for later consequences in the victim's life.

Results seem to confirm a kind of “cycle-of-violence” in domestic life, both among women as victims and men as perpetrators. As outlined in the discussion it could be interesting to study men re-victimization as well through a similar victimization survey.

A future line of analysis will be the study of women re-victimization even outside of the domestic environment.

References

- Agresti, A. (2002). *Categorical Data Analysis*. Wiley series in Probability and Statistics.
- Cicchetti, D., & Rizley, R. (1981). Developmental perspectives on the etiology, intergenerational transmission, and sequelae of child maltreatment. *New Directions on Child Development*, 11, 31-55.
- Coid, J. et al. (2001). Relation between childhood sexual and physical abuse and risk of revictimisation in women: a cross-sectional survey. *The Lancet*, 358, 450-454.
- Dawid A. P. (2000). Causal inference without counterfactuals. *Journal of the American Statistical Association*, 95(450), 407-424

- Deville J. C., & Sarndal, C. E. (1992). Calibration Estimators in Survey Sampling. *Journal of the American Statistical Association*, 87(418), 376-382.
- Gil-González D., Vives-Cases C., Ruiz M. T., Carrasco-Portiño M., & Álvarez-Dardet C. (2008). Childhood experiences of violence in perpetrators as a risk factor of intimate partner violence: a systematic review. *Journal of Public Health*, 30(1), 14-22.
- Heise, L. (1998). Violence against women. An integrated, ecological framework. *Violence against Women*, 4, 262-290.
- Holland, P. W. (1986). Statistics and causal inference. *Journal of the American Statistical Association*, 81(396), 945-960.
- Hotaling, G. T., & Sugarman, D. B. (1986). An analysis of risk markers in husband to wife violence. *Violence and Victims*, 1(2), 101-124.
- Istat (2008). La violenza contro le donne. Indagine multiscopo sulle famiglie "Sicurezza delle donne" [Violence against Women. Multi purpose Istat Survey "Women Safety"]. *Informazioni, Anno 2006*.
- Martin, S. L. et al. (2002). Domestic violence across generations: findings from Northern India. *International Journal of Epidemiology*, 31, 560-572.
- Pollack, R. A. (2004). An intergenerational model of domestic violence. *Journal of Population Economics*, 17(2), 311-329.
- Schneider, A. L., & Sumi, D. (1981). Patterns of forgetting and telescoping. An analysis of LEAA Survey Victimization Data. *Criminology*, 19(3), 400-410.
- Stith, S. M. et al. (2000). The intergenerational transmission of spouse abuse: A meta-analysis. *Journal of Marriage and the Family*, 62, 640-654.
- Sugarman, D. B., Hotaling, G. T. (1989). Violent Men in Intimate Relationships: an Analysis of Risk Markers. *Journal of Applied Social Psychology*, 19(12), 1034-1048.
- UNECE and UNDAW (2007). Indicators to measure violence against women. Report of the Expert Group Meeting, Geneva, 8 to 10 October 2007. Retrieved from http://www.un.org/womenwatch/daw/egm/vaw_indicators_2007/eg_m_vaw_indicators_2007.htm

