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Crimes against the elderly in Italy, 2007–2014

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ABSTRACT

Crimes against the elderly have physical, psychological, and economic consequences. Approaches for mitigating them must be based on comprehensive knowledge of the phenomenon. This study analyses crimes against the elderly in Italy during the period 2007–2014 from an epidemiological viewpoint. Data on violent and non-violent crimes derived from the Italian Institute of Statistics were analysed in relation to trends, gender and age by linear regression, T-test, and calculation of the odds ratio with a 95% confidence interval. Results show that the elderly are at higher risk of being victimized in two types of crime, violent (residential robbery) and non-violent (pick-pocketing and purse-snatching) compared with other age groups during the period considered. A statistically significant increase in residential robbery and pick-pocketing was also observed. The rate of homicide against the elderly was stable during the study period, in contrast with reduced rates in other age groups. These results may be explained by risk factors increasing the profiles of elderly individuals as potential victims, such as frailty, cognitive impairment, and social isolation. Further studies analysing the characteristics of victims are required. Based on the results presented here, appropriate preventive strategies should be planned to reduce crimes against the elderly.

1. Introduction

Crimes against the elderly have consequences for public health and criminal justice.[1–3] The extent of the phenomenon is not yet fully known[1–3] and may increase as the population ages; the world's population of persons aged 60 or older is expected to increase from 900 million in 2015 to about 2 billion in 2050,[1,4] and may expose more elderly people to danger from criminal actions against them.

The elderly, conventionally defined as subjects over the age of 65,[5] represent a vulnerable category.[1,6] Factors increasing the profiles of the elderly at such risk can be identified at individual, relational, community and socio-cultural levels.[1,2,7,8] Individual risk factors include poor physical health, cognitive impairment, frailty, low education level, economic insecurity, and single marital status (unmarried, divorced, widowed)[1,2,4,5,9,10]; relational risk factors refer to dependency on or relationship difficulties with the abuser[1,2,4,5,11,12]; and community and socio-cultural risk factors include social isolation, lack of social support, changed family structure, migration of offspring, and discrimination against older people (ageism).[2,4,13]

These risk factors may expose the elderly to both violent[2,3] and non-violent[10,11,13] crimes. Violent crimes (homicide, sexual violence, and personal injury) are offenses entailing the use of force or injury to the body of another person; non-violent crimes (burglary, theft, arson, and vandalism) do not include the use of any force and are usually related only to economic damage to the victim. Particular crimes are reported in specific contexts: neglect, maltreatment and isolation are described in nursing homes and care institutions,[1,14,15] and financial crimes,[16,17] such as phishing (attempts to steal confidential and sensitive data via the Web)[18] and other types of internet fraud, are related to the use of new technologies.

Regardless of the type of felony, the physical and psychological consequences are more serious in the elderly than in other age groups.[19,20] This is due to the intrinsic vulnerabilities of elderly people and are manifested as aggravation of comorbidities, poorer quality of life, loss of self-confidence and autonomy, and increasing experience of discomfort, fear, distress, anger, and/or

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depression.[1,21–26]

Strategies implemented to prevent crimes against the elderly and to mitigate the consequences have included public and professional awareness campaigns, screening of potential victims and abusers, caregiver support interventions, and programs for diagnosis, rehabilitation and support of victims.[4,27] Any approach to these problems must be based on evidence of their scale, trends, distribution, causes, and risk factors.[27] National statistics on crimes suffered by the elderly may represent a useful tool to evaluate the phenomenon as a first step toward the development of efficient, effective and sustainable intervention strategies.[27]

The main purpose of this study is thus to analyse the scale and trends of violent and non-violent crimes against the elderly in Italy during the period 2007–2014. A secondary aim is to compare crimes against the elderly with those targeting other age groups.

2. Materials and methods

This is a population-based study on crimes committed against persons aged 65 or older in the period 2007–2014 in Italy. The data were taken from the Italian Institute of Statistics (ISTAT)[28] and include all felonies reported to the police. Felonies are actions prohibited by the Italian Penal Code and linked to criminal sanctions. Data collected by law enforcement agencies are analysed by ISTAT, a public research organization, and the main producer of official statistics serving citizens and policy-makers (http://www.istat.it/en/). The European Statistical System, including Eurostat and the statistical offices of all Member States, guarantees that European and Italian statistics produced in all EU Member States are reliable, based on the same methodology, with data comparable among different countries (http://www.istat.it/en/). Data are freely available to users.

Statistics on felonies against life, individual safety, and property were analysed and evaluated, with particular focus on first- and second-degree murder, manslaughter, attempted homicide, personal injury, sexual violence, robbery, computer and other types of fraud, criminal usury, criminal property damage, theft, purse-snatching, and pick-pocketing.

According to the Italian Penal Code, first-degree murder is any intentional murder, second-degree murder is the death of a person resulting from an act intended to cause bodily harm; manslaughter is the killing of a human being without deliberation, due to negligence, imprudence, incompetence, or non-observance of rules. Personal injury is physical or psychological damage resulting from physical aggression; sexual violence is a sexual act committed without valid consent on the part of the second person; robbery is taking money or goods by force or intimidation; fraud is a crime performed with dishonest methods to deprive another person of something deemed to be valuable; computer fraud is a financial offense committed through a computer network; criminal usury is charging higher than the maximum legal amount of interest for lending money; criminal property damage, theft, purse-snatching and pick-pocketing share the same meanings given to them in other EC countries.

Following the literature on delinquency,[29,30] felonies were grouped into non-violent and violent acts (Table 1). For homicide, manslaughter and robbery, the specific circumstances of the event (available in the ISTAT database) were also included.

The phenomenon was analysed in relation to gender, age, and changes over time. The age groups used for comparison with individuals over the age of 65 were 18–24, 25–34, 35–44, 45–54 and 55–64. Direct standardization for all ages was performed according to European Standard Population 2013.[31] Data were analysed by linear regression, Student's t-test, and calculation of the odds ratio with a 95% confidence interval.[32] All analyses were performed with IBM SPSS Statistics 23.0 for Windows (Chicago, IL)[33] and GraphPad Prism 5.01 (GraphPad Prism, 2009).[34]

Table 1
Violent and non-violent acts.

Violent acts	Non-violent acts
Homicide	Fraud
Attempted homicide	Computer Fraud
Second-degree murder	Criminal usury
Manslaughter	Criminal property damage
Personal Injuries	Theft
Sexual violence	Purse-snatching
Robbery	Pick-pocketing

3. Results

In the period 2007–2014, the elderly constituted on average 20.5% of the Italian population. Elderly victims represented 68,161 persons involved in 657,142 violent acts (10.37%) and 1,990,822 out of a total of 12,895,233 non-violent criminal acts (15.43%). The totals, means and standard deviations (SD) for each type of crime are listed in Table 2.

After direct standardization for age, means and SD for violent and non-violent crimes are listed in Table 3. Personal injuries and robberies were the two violent felonies committed at the highest rates of all crimes against the elderly (mean ± SD 6.53 ± 0.46 and 5.91 ± 1.44, respectively). Among non-violent acts against the elderly, theft was the crime with the highest rate (314 ± 48.76).

According to linear regression analysis, trends of violent crimes remained stable for most of the felonies committed during the study period; a significant increase was observed only for residential robberies ($F = 6.67$; $p = 0.04$). Trends of violent crimes against the elderly per 100,000 violent crimes are shown in Fig. 1.

According to linear regression analysis, 2007–2014 involved a trend of increasing non-violent crimes, including computer fraud ($F = 12.07$; $p = 0.01$), criminal usury ($F = 7.04$; $p = 0.03$), theft ($F = 10.64$; $p = 0.01$), and pick-pocketing ($F = 5.66$; $p = 0.05$); trends per 100,000 of non-violent acts are shown in Fig. 2.

The rate of felonies committed against men over the age of 65 is higher than that for women over 65, except for sexual violence, pick-pocketing and purse-snatching (Table 4). Student's t-test shows significant differences between the means for violent and non-violent felonies targeting men and those targeting women, apart from mafia- and robbery-related homicides and residential robbery (Table 4).

Linear regression analysis shows that, as regards violent crime, subjects over 65 are more at risk than other age groups in relation to homicide rate (higher than the homicide rate observed in the 18–24, 35–44 and 55–64 age groups) and residential robberies (higher than the rate observed in all other age groups). Street robberies were more frequent against subjects aged 18–34 (Fig. 3) and robbery was more frequent in victims aged 25–34; personal lesions were more frequently carried out in all younger categories, compared with the elderly.

As regards non-violent crimes, the elderly were at higher risk than other age groups of pick-pocketing and purse-snatching ($p < 0.05$) (Fig. 3), but not computer fraud or other non-violent felonies.

4. Discussion

Following the aims of this study, we analysed the scale and trends of violent and non-violent crimes against the elderly, and then compared crimes against the elderly with those targeting

Table 2
Number of felonies experienced by elderly - 2007–2014.

	2007	2008	2009	2010	2011	2012	2013	2014	Total	Mean	SD
Population	11,792,752	11,945,986	12,085,158	12,206,470	12,301,537	12,370,822	12,639,829	13,014,942			
Violent acts											
Homicide	77	78	105	76	82	93	92	100	703	87.875	10.45
Robbery related homicide	10	16	13	16	11	22	18	17	123	15.375	3.67
Mafia related homicide	3	2	1	1	0	1	4	2	14	1.75	1.19
Attempted homicide	76	74	71	59	82	100	78	82	622	77.75	10.87
Second degree murder	8	4	10	9	9	7	14	11	72	9	2.73
Manslaughter	389	354	173	477	529	566	530	506	3524	440.5	121.91
Manslaughter related to car accident	315	280	133	363	387	412	347	333	2570	321.25	80.84
Personal injuries	3816	4082	3739	3644	4053	4513	4521	4640	33,008	4126	363.22
Sexual violence	38	44	35	33	39	44	38	38	309	38.625	3.60
Robbery	3987	3365	2077	2732	3787	4815	4632	4528	29,923	3740.375	905.38
Residential Robberies	967	797	497	660	1105	1579	1576	1489	8670	1083.75	398.74
Street robberies	1992	1675	995	1350	1887	2312	2104	2128	14,443	1805.375	414.20
Non-violent acts											
Fraud	18,875	14,455	12,464	12,320	12,535	14,412	16,345	17,093	118,499	14,812.38	2270.91
Computer Fraud	149	122	140	119	129	248	381	539	1827	228.375	144.66
Criminal usory	18	12	29	13	22	27	31	41	193	24.125	9.19
Criminal property damage	31,614	33,763	34,894	36,432	37,881	36,693	37,554	32,044	280,875	35,109.38	2274.54
Theft	186,893	163,944	159,753	164,560	200,136	220,694	238,408	255,040	1,589,428	198,678.5	34,034.01
Purse-snatching	5701	4635	3868	3687	4962	6275	5770	5268	40,166	5020.75	860.11
Pick-pocketing	32,202	25,941	25,840	25,919	31,749	34,576	37,527	42,279	256,033	32,004.13	5641.151

Table 3
Felonies suffered by elderly - 2007–2014.

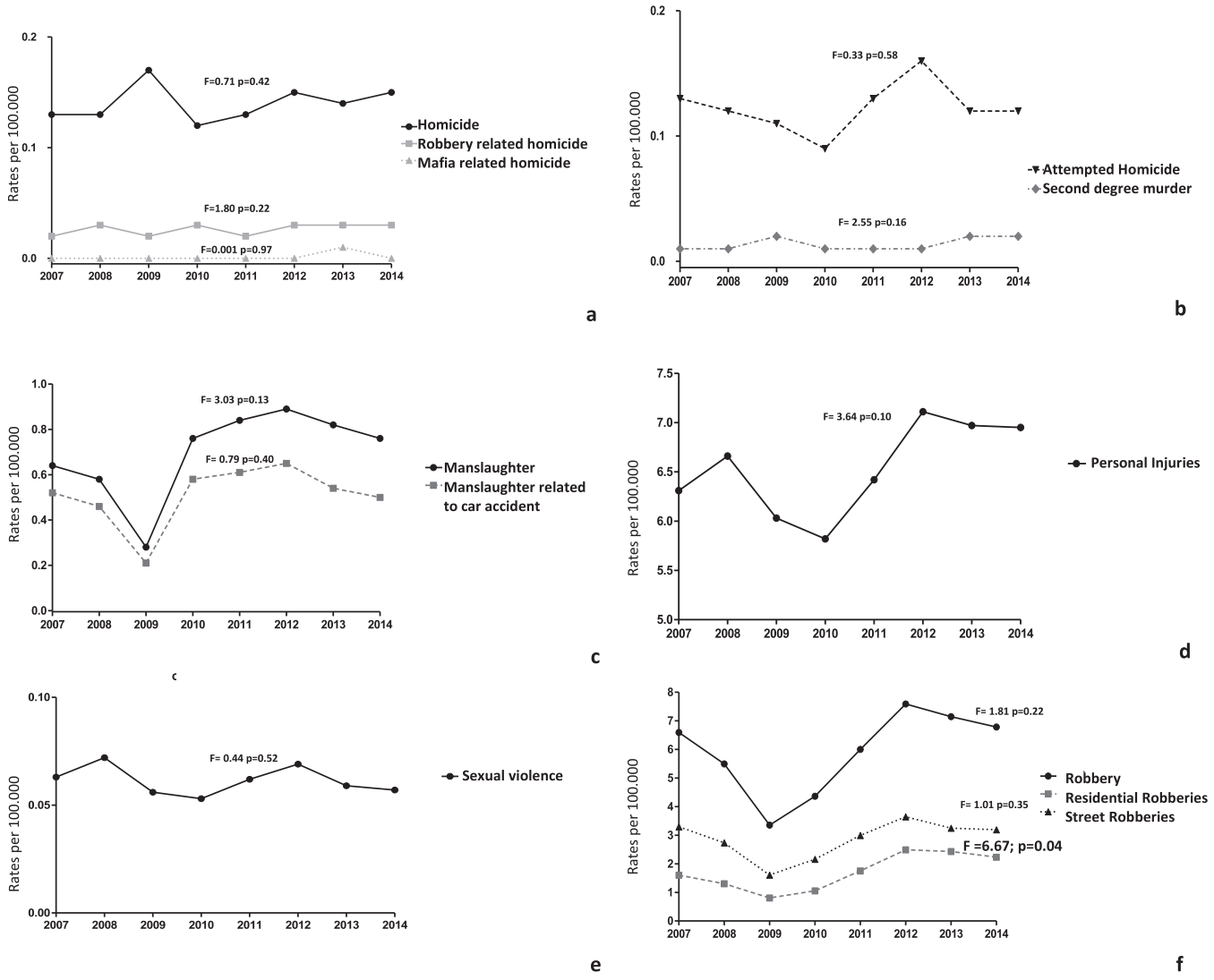
Violent acts			Non-violent acts		
	Mean	St Dev		Mean	St Dev
Homicide	0,13	0,01	**Fraud**	23,50	3,90
Robbery related homicide	0,02	0,005	**Computer Fraud**	0,35	0,22
Mafia related homicide	0,002	0002	**Criminal usury**	0.037	0.01
Attempted homicide	0,12	0,017	**Criminal property damage**	55.71	3.89
Second degree murder	0,01	0,004	**Theft**	314.04	48.76
Manslaughter	0,69	0,19	**Purse-snatching**	7.95	1.42
Manslaughter related to accident	0,50	0,13	**Pick-pocketing**	50.59	8.19
Personal injuries	6,53	0,46			
Sexual violence	0,06	0,006			
Robbery	5,91	1,44			
Residential Robberies	1,70	0,63			
Street Robberies	2,85	0,67			

other age groups.

Personal injury and robbery were the two violent felonies committed at the highest rates of all crimes against the elderly. The rates of most such violent crimes, with the exception of residential robbery, were stable over the period 2007–2014, and were lower than those suffered by other age groups. These data are consistent with the level of victimization of the elderly observed in other studies.[35,36] In some types of felonies, such as homicide, the stable rate of crimes committed against the elderly is in contrast with reduced numbers of crimes against individuals in other age groups (18–24 and 35–44); nonetheless, in Italy this rate remains very low (0.1 per 100,000) compared with the world homicide rate.[37] The standardized homicide rate against the elderly was higher than that against individuals aged 18–24, 35–44 and 55–64 ($p < 0.05$); these data were unexpected, particularly in the case of the 18–24 age group, who are usually the most frequently targeted by this type of crime. It may be explained by the fact that only one in five homicides involving victims under the age of 65 occur during another felony, such as robbery, theft or rape, whereas over one-third of homicides involving the elderly occur during another felony.[38] Another factor related to the lower homicide rate among younger people may be the reduction in mafia-related homicides,[37] which mainly involve people under the age of 65.

The only violent felony against the elderly which increased significantly in the seven-year period considered was residential robbery, with a rate higher than that observed in all other age groups. According to the Italian Penal Code, robbery is defined as violence done or threatened to persons in order to steal their possessions; although robbery rates during the study period were stable in the general population, residential robbery effected by entering a building increased against victims over 65 years old. Although the Italian Penal Code definition of robbery is equivalent to that of other countries,[39] the Italian data are in contrast with the decrease in this type of crime in other countries, as shown by the relative literature.[38,40]

The data from this study are worrying but not unexpected, as an increase in some kinds of crimes, concentrated on the elderly as a vulnerable group, may also represent a response to the economic crisis in both Italy and Europe.[41] Another explanation is that elderly individuals spend more time inside their houses than younger people do, often due to difficulties in walking or a sense of insecurity. This exposes them to more residential robberies than to other kinds of felonies and explains the fear level experienced by the elderly described in the literature.[40] This association between age group and risk level for different types of crime is also supported by the higher rates of robberies and street robberies



a=homicide trends; b=attempted homicide and second degree murder trends; c=manslaughter trends; d=personal injury trends; e=sexual violence trends; f=robbery trends

Fig. 1. Trends in violent acts in elderly.

committed against younger individuals than against the elderly.

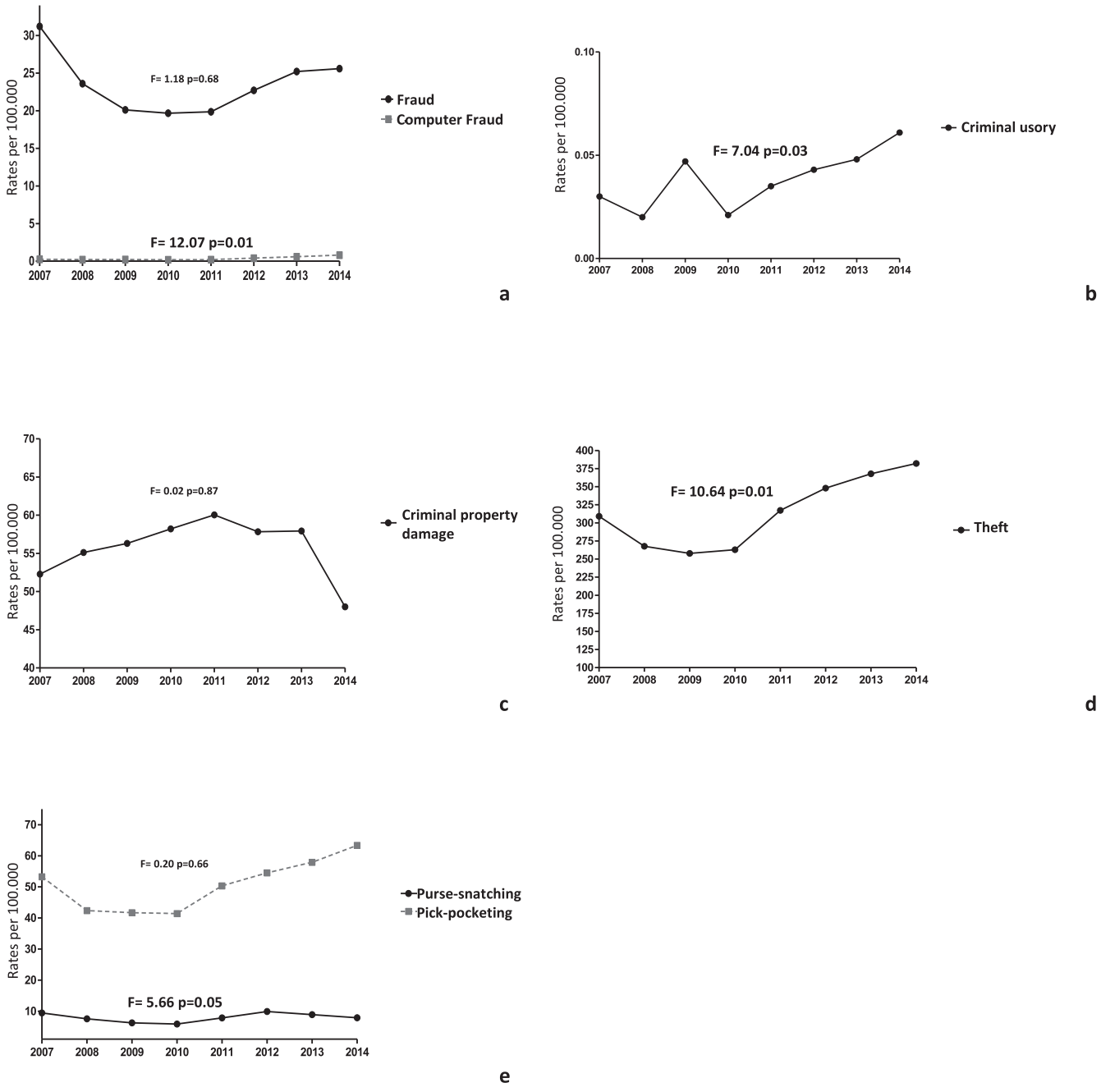
Data on violent crimes must be considered in relation to their consequences.[19,22] Victimization may have negative physical, psychological and economic effects.[1,2] The first two consequences are due to the intrinsic predisposition of the elderly to frailty,[19,20] which may cause acute or chronic physical or psychiatric illness. According to Serfaty et al.,[42] the risk of physical and/or psychological consequences of victimization due to crime remains high when no intervention occurs. Post-traumatic stress disorder,[43] anxiety and depression[44] have been described in victims of burglary. Physical vulnerability produces more consequences for the elderly compared with other age groups; psychological consequences (apart from mental illness) mainly become manifested as fear.[40] Economic consequences may be direct or indirect[19] and are usually more serious for the elderly than for other age groups, since the elderly are, on average, poorer.[45]

Among non-violent acts against the elderly, theft was the crime with the highest rate, consistent with the other age groups. Theft involving computer fraud, criminal usury and pick-pocketing was characterized by an increasing trend. These data may be explained by the same reasons used to explain the increase in residential robbery (economic crisis and vulnerability of the elderly in relation to certain types of criminal conduct). Higher rates of computer fraud (illegal access to computers, detention or distribution of computer access codes, or diffusion of computer programs aimed at damaging computer systems) may reflect the difficulties in using new technology encountered by the elderly.

The data on pick-pocketing and purse-snatching were higher than those observed in all the other age groups, consistent with the real or presumed (by criminals) physical vulnerability of the elderly, especially women.

As with violent crimes, the consequences of non-violent crimes are physical, psychological and economic[40]; without intervention, elderly victims are at high risk of developing stress symptoms.[42]

Comparison of violent crime rates between men and women reveals higher rates of violent felonies committed against men than women, except in cases of sexual violence; this is consistent with the criminological literature, although the data on sexual violence



a=fraud and computer fraud trends; b=criminal usory trends; c=criminal property damage trends; d=Theft trends; e=purse-snatching and pick-pocketing trends

Fig. 2. Trends in non-violent acts in elderly.

may be less reliable compared with others, since this crime is often under-reported.

Pick-pocketing and purse-snatching were higher for women than men. These results may be interpreted as the longer autonomy of women, even in their old age, resulting in longer exposure to the risk of this type of crime.

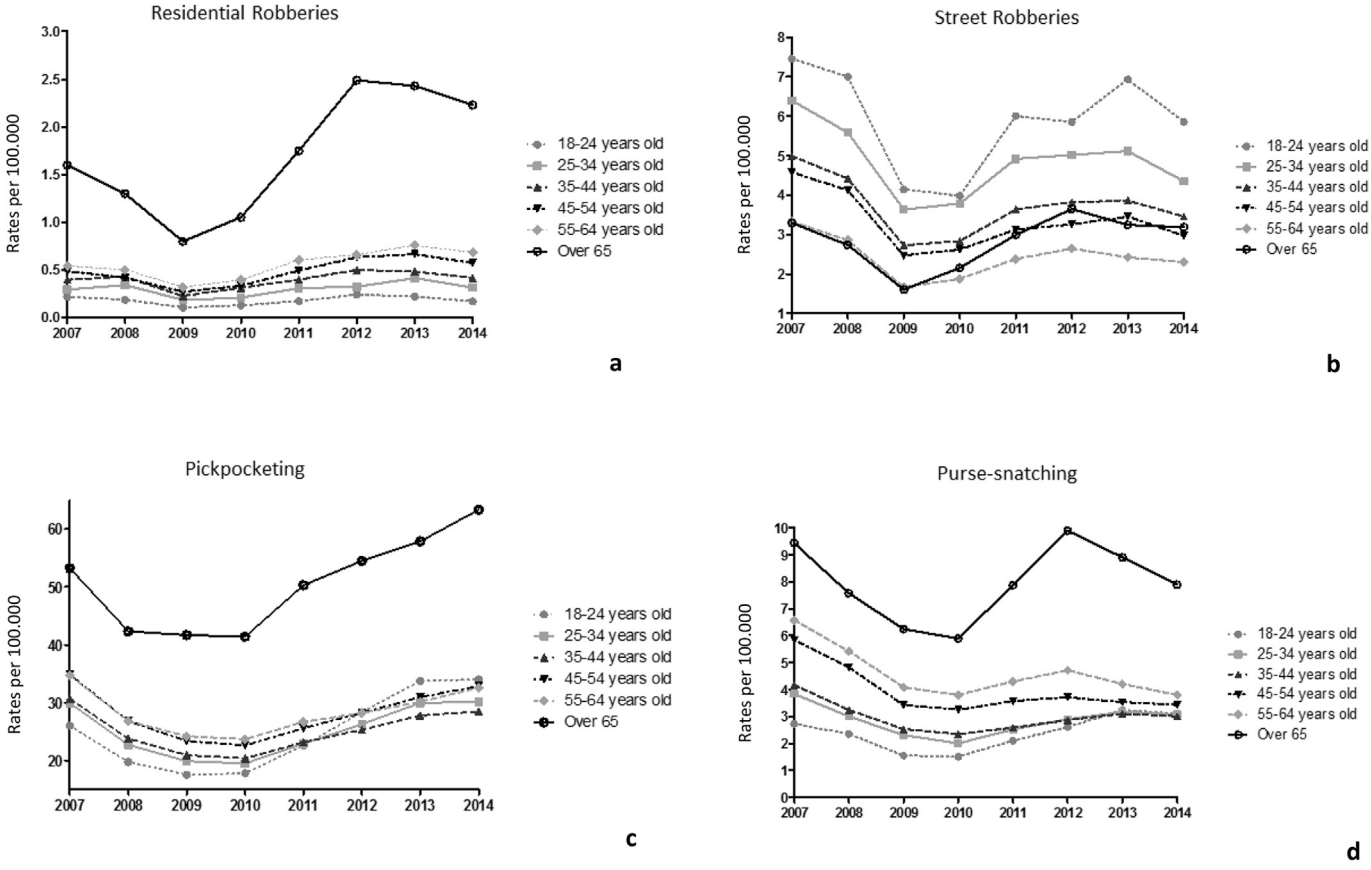
The results of this study are an important initial step in describing crimes against the elderly in Italy and may provide a basis for establishing a scale of priority for intervention.[27] A schedule for nation-wide action could be developed by referring to one of the international planning guides for crime prevention, such as the Beccaria Standards for ensuring quality in crime prevention projects.[27,46] Identification of trends and possible causes of crimes against the elderly could be confirmed by analysis at local level. Local analysis could identify the most vulnerable demographics and geographical areas, and improve planning.

This study is limited by its data source, since crimes reported to the police may underestimate the true number of crimes. The

Table 4
Felonies undergone by elderly by gender - 2007–2014.

	Male		Female		P-value[a]	OR[b]	CI[c]
	Mean	St Dev	Mean	St Dev			
Violent acts							
Homicide	0.16	0.02	0.11	0.01	0.001	1.4	1.20–1.62
Robbery related homicide	0.02	0.00	0.02	0.009	0.962	1.0	0.7–1.43
Mafia related homicide	0.00	0.0001	0.0003	0.001	0.355	17.8	2.33–136.07
Attempted homicide	0.18	0.03	0.07	0.008	<0.001	2.38	2.02–2.81
Second degree murder	0.02	0.01	0.006	0.003	<0.001	3.82	2.26–6.45
Manslaughter	1.02	0.30	0.45	0.12	<0.001	2.28	2.13–2.44
Manslaughter related to accident	0.74	0.21	0.33	0.08	<0.001	2.24	2.07–2.43
Personal injuries	9.59	0.73	4.30	0.26	<0.001	2.23	2.18–2.28
Sexual violence	0.02	0.008	0.09	0.01	<0.001	0.22	0.16–0.31
Robbery	7.56	1.53	4.71	1.46	0.002	1.6	1.56–1.64
Residential Robberies	1.87	0.58	1.58	0.68	0.370	1.19	1.14–1.24
Street Robberies	3.66	0.72	2.26	0.68	0.001	1.61	1.56–1.66
Non-Violent acts							
Fraud	30.19	5.05	18.60	3.20	<0.001	1.62	1.61–1.64
Computer Fraud	0.63	0.39	0.15	0.10	0.005	4.25	3.82–4.73
Criminal usory	0.06	0.027	0.015	0.007	<0.001	4.38	3.14–6.09
Criminal property damage	97.88	7.31	24.95	2.075	<0.001	3.91	3.88–3.95
Theft	417.25	60.86	238.59	38.97	<0.001	1.75	1.75–1.76
Purse-snatching	3.66	0.92	11.09	1.90	<0.001	0.33	0.32–0.34
Pick-pocketing	42.56	6.88	56.46	9.40	0.005	0.75	0.75–0.76

[a] Student's T-Test.
[b] Odds ratio.
[c] Confidence interval.



a=residential robberies; b=street robberies; c=pickpocketing; d=purse-snatching

Fig. 3. Trends of residential and street robberies, pickpocketing and purse-snatching - 2007–2014.

victims' reasons for not reporting crimes vary[47] and include dependency on the perpetrator, fear of being transferred to an institution, and worry that the police will not help. Victims sometimes seem unaware of the seriousness of the crime, or believe - erroneously - that victimization is a natural consequence of being elderly. The discrepancy between the reported and real numbers of crimes depends on the type of crime. Successful crimes are generally reported more often than attempted ones, and offenses which require an official complaint for insurance purposes are also reported more frequently.[48] Consequently, data on homicide, residential robbery, theft, pick-pocketing, and purse-snatching may be considered more reliable than other data, e.g., those on computer fraud.

The source of data in some crimes - e.g. purse-snatching and theft - do not exclude the use of violence against the person, and this fact should be considered in interpreting the data.

Another limitation of this study is the lack of data on abuse of the elderly in the community setting[12]: difficulties related to the diagnosis of crime and varying types of incrimination cause this felony to be underestimated.[12] Economic crimes which take advantage of the psychological difficulties of the elderly (e.g., circumvention of an incapable person) are equally not reported in our data.[49] Future studies should investigate these kinds of offenses, analysing risk factors specifically related to the victimological profile of the elderly, and also to an extra stratification of subjects aged over 65, in view of the different age distribution between men and women.

Another aspect which should be investigated in future studies is the awareness of health workers of economic crimes involving the elderly. These studies should be followed by appropriate sensitization to the problem.

5. Conclusions

The elderly are particularly at risk of being victimized in violent (residential robberies) and non-violent crimes (pick-pocketing and purse-snatching), with an increase in residential robbery and pick-pocketing observed in the period 2007–2014. The phenomenon may be underestimated to varying degrees, depending on the crimes analysed. Their consequences are physical, psychological and economic. Appropriate strategies should be implemented to reduce such crimes and their consequences for the elderly, ideally after analyses focusing on causes and risk factors conducted at local level.

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