Older offenders deemed criminally irresponsible in Flanders (Belgium): Descriptive results from a retrospective case note study

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ABSTRACT

Introduction: In Belgium, offenders who are deemed criminally irresponsible for their criminal actions because of mental illness or intellectual disability are subject to a specific safety measure with the dual objective of protecting society and providing mandated care to the offender. While Belgian law requires that offenders who are deemed criminally irresponsible should be in a hospital, clinic or other appropriate institution outside of prison, in practice about one third of all such offenders still reside in prison. Whether imprisoned or living in settings outside prison, there is a dearth of knowledge on the characteristics of the aging population among the criminally irresponsible offenders.

Objective: This paper aimed to explore the characteristics of older offenders categorized as criminally irresponsible in Flanders (northern Belgium) with a focus on the differences between imprisoned older offenders deemed criminally irresponsible and their peers who are residing outside prison.

Method: A retrospective case note study of all offenders deemed criminally irresponsible, $\geq$ 60 years of age (n=174), was conducted in the four Commissions of Social Defense, which implement the procedure in the case of those deemed criminally irresponsible in Flanders. The files were screened for (1) demographic characteristics, (2) criminal history as well as (3) mental and physical health issues.

Results: One-fourth of the population were $\geq$ 70 years of age. 30.5% were in prison. Compared to their non-imprisoned peers, the imprisoned offenders had a history of having committed more serious violent crimes towards persons, such as homicides and sexual crimes. In addition, imprisoned older offenders categorized as criminally irresponsible are characterized more explicitly by personality traits that are likely to reduce their chances of being transferred to more appropriate settings in the community.

I**mplications**: A comprehensive and systematic screening of all older offenders deemed criminally irresponsible with regard to health needs and social functioning, including age-related deterioration, alcoholism, and other causes of social disadvantages, is warranted to detect potentially hidden problems.

KEYWORDS: older, elderly, offenders, characteristics, mentally ill, legal insanity, insanity defense, criminal responsibility.

1 INTRODUCTION

A heightened interest in the aging of offenders has been noted in many Western countries, mainly because of the high costs associated with age-related health care among the growing population of older prisoners (Chiu, 2010). The increase of imprisoned older offenders may be partly explained by the aging of society, but may also have been exacerbated by the excessive use of punitive sentencing practices in the past, e.g., 'the three strikes and you are out law' in the USA (Fellner, 2012). Although there is a noticeable difference in the growth of the population between the USA (16.5% ≥ 50 years of age, according to Kim & Peterson, 2014) and most other Western countries [e.g., 10% in UK (House of Commons Justice Committee, 2013)], aging in prisons is an increasing concern (Aday, 2013).

Consequently, correctional systems are challenged to address age-related problems, such as dementia (Maschi, Morgen, Zgoba, Courtney, & Ristow, 2011), and other needs, such as age appropriate accommodation and social isolation (Hayes, Burns, Turnbull, & Shaw, 2013).

Internationally, most contemporary legal systems incorporate the principle of "*legal insanity*" for offenders diagnosed with mental disorders (Kalis & Meynen, 2014). According to this principle, offenders should be provided with appropriate care where they are either unable, or can only to a certain degree, be held criminally responsible for their offences (Penney, Morgan, & Simpson, 2013).

In this context, the Belgian law applies a dichotomized model in which offenders are considered either fully responsible or fully irresponsible for their criminal acts (Protais, 2014). In cases where individuals have the legal capacity to be responsible for their crimes, offenders can be found guilty by a judge or court and in such cases are subjected to a sentence, which is – in case of imprisonment – predetermined in time. On the other hand, criminal offenders who are evaluated by an expert-psychiatrist during the investigation process and found to be criminally irresponsible become subject to the so called "measure of internment", which is indeterminate in time (Vandevelde, Soyez, Vander Beken, De Smet, Boers & Broekaert, 2011). This judicial measure is aimed (1) at safeguarding society against dangerous offenders and – at the same time – (2) at treating the offenders who are considered as patients or as persons who should be supported, due to mental illness or intellectual disabilities (Van Assche, 2013). Up until now, the Commission of Social Defense (CSD) is responsible for the implementation and evaluation of the measure which means that it is the Commission's prerogative to decide on where the offender is referred to (Cosyns, 2005). The CSD also decides on the duration and termination of the measure, based on an evaluation of the 'social dangerousness' of the individual and an improvement in the condition (e.g. the psychiatric illness) on which the measure is based (Vandevelde et al., 2011). Given the insufficient capacity of (forensic) care facilities in Belgium, many offenders deemed criminally irresponsible are sent to prison, often without substantial care provision (Vandevelde et. al., 2011). In 2011, 28.3% (n= 1,158) of all Belgian offenders deemed criminally irresponsible (n= 4093) were imprisoned in regular prisons (Moens & Pauwelyn, 2012). Furthermore, 45.2% (n=2,255) of the offenders deemed criminally irresponsible were managed within probation services, either living independently at home, or in other services such as specialized forensic units, regular mental health care settings or facilities for people with intellectual disabilities (Moens & Pauwelyn, 2012). Because of the precarious living

conditions of imprisoned offenders deemed criminally irresponsible and the expectation that care provision outside prisons could not be created in a short amount of time, imprisoned offenders deemed criminally irresponsible have been separated in most prisons from the other prisoners and since 2007 they have been looked after by small multidisciplinary care teams. However, it cannot be ignored that these care teams are seriously understaffed in number and are only capable of dealing with the most immediate and basic care needs. Despite some additional initiatives that have been undertaken in some prisons e.g. for those with intellectual disabilities (Vanden Hende, Caris & De Block-Bury, (2005), the overall situation of those offenders deemed criminally irresponsible accommodated in prison still remains at a substandard level; a situation for which Belgium has repeatedly been criticized by the European Court of Human Rights (ECHR).

At the time of the present study (2011), the Flemish population (the Dutch-speaking part of Belgium) of offenders deemed criminally irresponsible numbered 1962 (Moens & Pauwelyn, 2012), of whom 8.9% were > 60 years of age (n=174). The main aim of the present study is to describe the situation of older offenders deemed criminally irresponsible in Flanders with respect to (1) demographic characteristics; (2) crime history; and (3) mental and physical health issues. As a substantial number of offenders deemed criminally irresponsible reside in prison and because a prison environment is not considered to be the most suitable environment for treatment, we have compared these characteristics for imprisoned offenders deemed criminally irresponsible and their non-imprisoned counterparts. As this is – to our knowledge – one of the first studies that tackles this question, the article reports on information that has not been available up until now. In the discussion, we will reflect on the most pertinent findings, and make recommendations on how meeting the dual mandate which requires the provision of appropriate care to older criminally irresponsible offenders, while simultaneously protecting society, could be more optimally delivered in Belgium and

internationally. Specific attention will be given to what we could learn from the differences between imprisoned and non-imprisoned older criminally irresponsible offenders.

2 METHOD

2.1 Setting and participants

A retrospective case note study of older offenders deemed criminally irresponsible was conducted in the four CSDs in Flanders, which are established in the regional cities of Ghent, Brussels, Antwerp, and Leuven. The Commissions' secretariats manage the files in which information from various sources is recorded, e.g., compliance with probation rules, periodic social reports, police reports, observation reports, psychological reports, and notifications of transfers or absence without permission. The CSD takes all judicial decisions concerning alterations in the probation rules, changes in the care trajectory, and if applicable, cessation of the status of criminal irresponsibility based on these files.

The inclusion criteria for the study were as follows: 1) case files of persons subjected to the measure of legal insanity at the time of the study; and 2) those $\geq$ 60 years of age.

2.2 Procedure and instruments

Since there is no central data management system across the four CSDs in Flanders, the relevant files were manually extracted from the case files in each of the four CSD secretariats. Between December 2010 and January 2011, the files of all 174 offenders deemed criminally irresponsible $\geq$ 60 years of age were identified. A codebook of 112 items was created comprising socio-demographic characteristics, criminal history factors, and psychiatric as well as the physical health issues of the offenders. The codebook was digitalized using Snap survey software, (Snapsurveys, London, UK - version Snap 10 Professional, 2014). Although Snap is primarily intended as an online web application, it was used in this study as a standalone data input system on a laptop. The digital inputting of data was carried out on site

by the first author. This procedure enabled a congruent and uniform process of data collection and any chances of input errors were minimized.

2.3 Data analysis

Descriptive statistics (frequencies and crosstabs) were applied to map the characteristics of the older offenders deemed criminally irresponsible. Chi-square statistics were used to evaluate the differences between older imprisoned and non-imprisoned offenders deemed criminally irresponsible at a bivariate level. All analyses were performed in SPSS 20.0 using a statistical significance threshold of $p<0.05$. In the results section of this paper, statistically significant results have been indicated in the tables by the symbol * .

2.4 Ethical considerations

Ethical approval (B.U.N. 14320109752) from the Ethics Committee of the University Hospital of the Vrije Universiteit Brussel (Free University of Brussels) was obtained, as well as authorization from the Belgian Federal Public Service for Justice to conduct the study. Only the first author had access to the records and data were analyzed confidentially and reported anonymously.

3 RESULTS

3.1 Demographic characteristics

Of the 174 offenders in this study, sixty-eight (39.0%) were accommodated in institutional care facilities outside of prison settings, of whom 55.7% (n=37) were in specialized geriatric facilities and 45.3% (n=31) were in mental health care. Nearly one-third of the offenders

(30.5% [n= 53]) were still imprisoned and 29.9% (n= 52) lived at home. In one case, the current place of residence was unclear.

In Table 1, the demographic characteristics of older offenders deemed criminally irresponsible are summarized. The population was mainly male (90.1%), with a mean age of approximately 67 years. Most of the older offenders deemed criminally irresponsible were of Belgian nationality (95.9%). The majority were poorly educated; indeed, > 50% of the offenders had only completed a primary education. Moreover, in 29.9% of the files, functional illiteracy and/or problems in calculating were reported. None of the differences between IOs and NIOs were statistical significant in Table 1.

Table 1. Demographic characteristics of older imprisoned (IOs) and non-imprisoned offenders deemed criminally irresponsible (NIOs)

		IO		NIO		Total	
		%	**N**	**%**	**N**	**%**	**N**
			53		**110**		**173**
Age	60–69 years	77.4	41	74.2	89	75.1	130
	70–79 years	20.8	11	20	24	20.2	35
	80 years of age and older	1.9	1	5.8	7	4.6	8
Gender	Female	5.7	3	11.7	14	9.9	17
	Male	94.3	50	88.3	106	90.1	156
Nationality	Belgian	92.5	49	95.8	115	94.8	164
	Other	5.7	3	3.3	4	4.0	7
	Unknown	1.9	1	0.8	1	1.2	2
Marital status	Married	7.5	4	20.8	25	16.8	29
	Never married	43.4	23	33.3	40	36.4	63
	Divorced	39.6	21	35.0	42	36.4	63
	Widowed	3.8	2	8.3	10	6.9	12
	Other	0	0	3.8	2	1.2	2
	Unknown	5.7	3	0.8	1	2.9	4
Highest level of education	Primary education	56.6	30	56.7	68	56.6	98
	Secondary education	35.8	19	24.2	29	27.7	48

	Higher education	3.8	2	9.2	11	7.5	13
	Adult education	0	0	5	6	3.5	6
	Unknown	3.8	2	5	6	4.6	8
Employment	Skilled employment	42.2	19	43.6	48	43.2	67
	Unskilled employment	51.1	23	46.4	51	47.7	74
	Executive / higher management	4.4	2	6.4	7	5.1	9
	Army	2.2	1	3.6	4	2.9	5
	Other	0	0	1.8	2	1.3	2

* $p<0.05$

Table 2 shows the negative life events experienced by older offenders deemed criminally irresponsible. Only the prevalence rates of $\geq$ 10% are shown. Generally, it appears that about three in four of the older offenders deemed criminally irresponsible experienced physically or mentally threatening living conditions at a young age (< 18 years). Psychological violence and neglect, physical violence, domestic violence within the family, and alcoholism of the parents was prevalent in at least one-fifth of the cases. More than one in three of the sample had at least one period in institutional care during childhood.

Table 2. Negative life events experienced by older imprisoned (IOs) and non-imprisoned criminally irresponsible offenders (NIOs)

		IO		NIO		Total	
		%	N	**%**	N	**%**	N
Negative life experiences (<18 years)			**53**		**116**		**169**
	No obvious negative life experiences reported	22.6	12	25	29	24.3	41
	Psychological neglect	30.2	16	19.8	23	23.1	39
	Physical violence	26.4	14	19.8	23	21.9	37
	Domestic violence – many conflicts	22.6	12	20.7	24	21.3	36
	Alcoholism – parents	18.9	10	20.8	25	20.2	35
	Sexual abuse	13.2	7	15.5	18	14.7	25
	• Sexual abuse by others	7.5	4	11.2	13	10.0	17
	• Sexual abuse by own parents	5.7	3	4.3	5	4.7	8
	Repression of the child	15.1	8	14.7	17	14.7	25
	Death of one or both parents	13.2	7	14.7	17	14.1	24

	Physical neglect	11.3	6	12.1	14	11.8	20
	Unknown/unreliable reporting	17	9	8.6	10	11.2	19
	Psychiatric illnesses involving parents	11.3	6	10.3	12	10.6	18
	Psychiatric illnesses involving siblings	7.5	4	12.1	14	10.6	18
	Child labor	9.4	5	10.3	12	10.0	17
Institutions during childhood (<18 years)							
	No history of institutional admissions	60.4	32	70.9	83	67.6	115
	Institution for special youth care	13.2	7	10.3	12	11.2	19
	Boarding school	11.3	6	11.1	13	11.2	19
	Reformatory school	11.3	6	6	7	7.6	13
	Unknown	11.3	6	6	7	7.6	13
	Child and adolescent psychiatry	7.5	4	6.8	8	7.1	12
	Adult psychiatry	3.8	2	6	7	5.3	9
	Service for persons with a disability	7.5	4	4.3	5	5.3	9

* $p<0.05$

With respect to negative life events, no statistically significant differences emerged between IOs and NIOs. Nevertheless it seems that IOs experienced more psychological neglect (IO, 30.2% vs. NIO, 19.8%) and had a more substantial history of institutional admissions than NIOs (IO, 39.6% vs. NIO, 29.1%).

3.2 Crime History

Table 3 presents an overview of offences committed at least once during the lifetime of these offenders. Sexual offences were the most prevalent, with approximately 55.5% of all older offenders deemed criminally irresponsible having committed rape and violent sexual offences and approximately 38.2% having a history of indecent assault without violence at least once in their lifetime. Minors were the most prevalent victims. Within the sample, 31.2% committed at least one sexual offence against minors they knew, 27.2% committed at least one offence against minors who they did not know, and 16.2% committed a sexual crime against a minor in their own family.

In nearly 13% of the cases, unequivocal references to delinquency under18 years of age were found in the case files. Within the sample 63.2% already had a criminal record before the current measure legal insanity, including 26.4% who had been the subject of at least one other measure of legal insanity previously. The mean duration of the current measure of legal insanity was 13.7 years (SD= 11.9 years, median= 10.4 years, minimum = 0.0 years, and maximum = 44.7 years).

The mean age at the first conviction was 40.1 years (SD, 13.8 years, median, 39.0 years, minimum 16.0 years, and maximum=85.0 years). 35.1% were $\geq$ 50 years of age when they were convicted for the first time. The proportion of first-time offenders > 60 years of age was 16.7% and 2.9% for those $\geq$ 70 years of age.

Recidivism seemed to be a feature of the cohort, in that several of the cohort continued to commit crimes at an older age; specifically, 33.1% of the sample were condemned for new offences when they were between 50 and 61 years of age, with approximately 25.6% condemned for new offences when they were > 60 years of age.

Table 3. Offences committed at least once during lifetime by older imprisoned (IOs) and non-imprisoned criminal irresponsible offenders (NIOs)

	IO		NIO		Total	
	%	N	**%**	N	%	N
		53		**120**		**173**
Rape and indecent assault by violence*	81.1	43	44.2	53	55.5	96
Theft	52.8	28	41.7	50	45.1	78
Indecent assault and sexual offences without violence	45.3	24	35.0	42	38.2	66
Battery and violence to persons	43.4	23	29.2	35	33.5	58
Defamation, slander, and insults	32.1	17	30.0	36	30.6	53
Homicide	24.5	13	16.7	20	19.1	33
Fraud and dishonesty	18.9	10	15.8	19	16.8	29
Attempted homicide*	22.6	12	10.8	13	14.5	25
Destruction or damage to property	13.2	7	11.7	14	12.1	21
Illegal possession of arms	9.4	5	9.2	11	9.2	16
Arson*	17.0	9	5.0	6	5.8	10
Drug-related offences	3.8	2	1.7	2	3.5	6
Type of victim of sexual offences	**%**	N	**%**	N	%	N
		53		**120**		**173**

Minor, no family, victim known*	47.2	25	24.2	29	31.2	54
Minor, no family, victim unknown	28.3	15	26.7	32	27.2	47
Minor within a family*	28.3	15	10.8	13	16.2	28
Adult, no family, victim known	15.1	8	8.3	10	10.4	18
Adult, no family, victim unknown	17.0	9	7.5	9	10.4	18
Adult within a family*	17.0	9	5.8	7	9.2	16

* $p<0.05$

Older IOs committed sexual offences with violence more often than NIOs (IO, 81.1% vs. NIO, 44.2%); X^2 (1, N = 173) = 20.34, p= .00001., and without violence (IO, 45.3% vs. NIO, 35.0%); X^2 (1, N=173) = 1.65, p= 0.11, NS). The most striking results concern sexual offences towards minors where the victim was known to the perpetrator (IO, 47.2% vs. NIO, 4.2%); X^2 (1, N = 173) = 9.06 , p = .003. and towards minors within the family (IO, 28.3% vs. NIO, 10.8%); X2 (1, N = 173) = 8,27, p= .004. Those IOs convicted of serious violent crimes were more frequently imprisoned due to battery and violence to persons (IO, 43.4% vs. NIO, 29.2%); X^2 (1, N = 173) = 3.34, p = 0.07, NS, homicide (IO, 24.5% vs. NIO, 16.7%); X^2 (1, N = 173) = 1.47, p = 0.23., NS, and attempted homicide (IO, 22.6% vs. NIO, 10.8%); X^2 (1, N = 173) = 4.15, p = 0.04. than NIOs. Arson was also a more frequently reported crime among IOs (17.0%) than NIOs (5.0%); X^2 (1, N = 173) = 6.66, p = .001.

3.3 Health

3.3.1 Physical health

Although not all files contained systematically-recorded information about the health status of the sample, the presence of physical disorders from the past could be retrieved in many cases, e.g., from the reports carried out by psychiatrists or social workers. In Table 4, physical disorders before and after 50 years of age are reported (only prevalence figures > 5% are included). Age-related disorders, such as diabetes, cardiovascular and lung disorders are

reported to a greater extent later in life (after 50 years of age), whereas traumatic brain injuries and bone fractures were reported more frequently in those under 50 years of age.

Table 4. Physical health problems of older imprisoned (IOs) and non-imprisoned criminal irresponsible offenders (NIOs)

	< 50 years of age						> 50 years of age					
	IO		NIO		Total		IO		NIO		Total	
	%	N	%	N	%	N	%	N	%	N	%	N
		53		**120**		**173**		**53**		**120**		**173**
Diabetes	5.7	3	4.2	5	4.6	8	7.5	4	11.7	14	10.4	18
Epilepsy	7.5	4	5	6	5.8	10	3.8	2	5	6	4.6	8
Brain injury (external trauma)	13.2	7	9.2	11	10.4	18	1.9	1	0	0	0.6	1
Brain damage alcohol/drugs	1.9	1	5	6	4	7	7.5	4	8.3	10	8.1	14
Cardiovascular–cholesterol	5.7	3	0	0	1.7	3	11.3	6	14.2	17	13.3	23
Cardiovascular – stroke	1.9	1	1.7	2	1.7	3	7.5	4	8.3	10	8.1	14
Cardiovascular – high blood pressure >50*	3.8	2	3.3	4	3.5	6	11.3	6	24.2	29	20.2	35
Bone fractures <50*	15.1	8	4.2	5	7.5	13	0	0	5.8	7	4.0	7
Respiratory diseases (excluding cancer and tbc)	0	0	2.5	3	1.7	3	3.8	2	8.3	10	6.9	12
Tuberculosis	5.7	3	5	6	5.2	9	0	0	0.8	1	0.6	1

* $p<0.05$

The number of older criminally irresponsible IOs compared with NIOs was small and did not reveal any statistical significant results. Nevertheless, it appears that older criminally irresponsible IOs experienced somewhat more bone fractures before 50 years of age (IO, 15.1% vs. NIO, 4.2%); X^2 (1, N = 173) =6.32, p= .001. Conversely, hypertension (IO, 11.3% vs. NIO, 24.2%); X^2 (1, N = 173) = 3.76, p = 0.05. NS and lung diseases (IO, 3.8% vs. NIO, 8.3%) N.S. were less frequently among IOs than among NIOs.

3.3.2 Mental health

Currently the judicial classification that applies to offenders deemed criminally irresponsible in Belgium remains based on legislation that dates from the 1930's. As a result, archaic Dutch

terminology is still in use nowadays and therefore we had to customize the terminology into the contemporary interpretation of the three categories used (table 5). (1) It appears that the majority (60.9%) of the older offenders deemed criminally irresponsible have been declared criminal irresponsible for 'miscellaneous' reasons, (2) one fifth (21.8%) because of mental illness and (3) one in five (20.7%) due to intellectually disability. Specific definitions of these categories are non-existent according to Van Assche (2013). However, according to Casselman et al. p41 (1997), the category 'miscellaneous' comprises a heterogeneous group of disorders that lead to 'abnormal aggressive or seriously irresponsible behavior'. In practice, this includes personality disorders, psychopathy, addiction problems, sexual disorders, and psycho-organic disorders. Mental illness refers to the presence of distinct psychiatric disorders that affect the sense of reality, e.g., psychotic disorders with hallucinations and delusions. According to the same authors, intellectual disability is defined by IQ < 70.

In addition to the judicial classification, each expert psychiatric report in the case files included a reference to either a broad typology of problems (e.g. intellectual disability or psychiatric disorder) or a range of manifestations of behaviors or symptoms, which are summarized in Table 5. In the vast majority of cases, specific DSM classifications appeared absent, i.e., in 91.3% and 94.2% of the cases for Axis 1 (main diagnoses, such as depression and schizophrenia) and Axis 2 (personality disorders, such as borderline personality disorder or antisocial personality disorder), respectively. Instead, psychiatric manifestations were described in a non-standardized jargon as presented in Table 5 (i.e., mental health problems and personality traits and behaviors).

Table 5. Psychiatric characteristics of older imprisoned (IOs) and non-imprisoned offenders deemed criminally irresponsible **(NIOs)**

	IO		NIO		Total	
	%	N	%	N	%	N

Judicial classification legal insanity		**51**		**116**		**167**
Intellectual disability (IQ < 70)	21.6	11	21.6	25	20.7	36
Psychiatric illnesses	15.7	8	25.0	29	21.8	37
Miscellaneous	62.7	32	53.4	62	60.9	94
Mental health problems		**51**		**113**		**164**
Psychotic disorders	47.1	24	48.7	55	48.2	79
Alcoholism	23.5	12	28.3	32	26.8	44
Sexual disorders	29.4	15	16.8	19	20.7	34
Personality disorders **(1)**	23.5	12	12.4	14	15.2	25
Psychopathy*	23.5	12	7.1	8	12.2	20
No specific psychiatric disorder described	11.8	6	12.4	14	12.2	20
Brain damage by substance abuse*	17.6	9	7.1	8	10.4	17
Others	7.8	4	11.5	13	10.4	17
Mood disorders	5.9	3	10.6	12	9.1	15
Brain damage by accident	9.8	5	5.3	6	6.7	11
Dementia	0.0	0	4.4	5	2.4	4
Number of diagnoses		**51**		**113**		**164**
1	45.1	23	53.1	60	50.6	83
2 or more	54.9	28	46.9	53	49.4	81
Personality traits and behavior		**53**		**120**		**173**
Poor self-insight*	86.8	46	67.5	81	74.0	128
Impulsive behavior and tempers	64.2	34	53.3	64	56.6	98
Lack of remorse*	71.7	38	42.5	51	51.4	89
Paranoid thoughts	35.8	19	39.2	47	38.2	66
Poor social skills	45.3	24	32.5	39	36.4	63
Immature behavior*	47.2	25	30.8	37	35.8	62
Over assessing own abilities	35.8	19	32.5	39	33.5	58
Lack of empathy*	45.3	24	26.7	32	32.4	56
Sexual disinhibited behavior	37.7	20	29.2	35	31.8	55
Aggression – verbal	39.6	21	25.0	30	29.5	51
Egoistic attitude*	39.6	21	23.3	28	28.3	49
Aggression – physical*	39.6	21	21.7	26	27.2	47
Manipulative behavior*	37.7	20	21.7	26	26.6	46
Lack of responsibility*	37.7	20	21.7	26	26.6	46
Histrionic – demanding behavior	28.3	15	25.0	30	26.0	45
Provocative behavior*	37.7	20	20.8	25	26.0	45
Easily influenced by others	22.6	12	20.0	24	20.8	36
Emotional insensitivity	26.4	14	15.8	19	19.1	33
Disinhibited behavior	20.8	11	15.8	19	17.3	30

(1) Other than psychopathy and other than personality disorders with psychotic symptoms

* $p<0.05$

Psychotic disorders appear to affect nearly half of the older offenders deemed criminally irresponsible. Alcoholism was diagnosed in one-fourth of the sample and brain damage by substance abuse in one of ten older offenders deemed criminally irresponsible. Alcoholism, as a psychiatric illness, has been reported far less frequently compared to the problematic ever-use of alcohol, which occurred in 60.3% of the cases. In contrast, the misuse or abuse of illegal substances was much lower. The three highest rates that could be retrieved were 4.6% for cannabis, followed by 3.6% for illegal sedative drugs (e.g. heroin), and 2.9% for illegal stimulant drugs (e.g. cocaine, amphetamines). Sexual disorders were diagnosed in one-fifth of the cases. Approximately half of the older offenders deemed criminally irresponsible were diagnosed with two or more comorbid psychiatric conditions.

Most expert psychiatric reports also contained descriptions of personality traits which characterize the daily functioning at the time of the psychiatric assessment of those in the sample. Poor self-insight and impulsive behavior were the two most prevalent characteristics (Table 5). It also became apparent from the additional notes that in nearly one in five cases (17.8%) that initially reported negative personality traits and problematic behavior from the past, these manifestations had become milder over time.

In terms of mental health problems, older criminally irresponsible IOs were more commonly diagnosed with sexual disorders (IO, 28.8% vs. NIO, 15.8%); X^2 (1, N = 164) =3.39, p = 0 .07, NS, personality disorders (IO, 23.1% vs. NIO, 11.8%); X^2 (1, N = 164) = 3.27, p = 0.07. NS., psychopathy (IO, 23.1% vs. NIO, 6.7%); X^2 (1, N = 164) = 8.88, p = 0.003. and brain damage by substance abuse (IO, 17.6% vs. NIO, 7.1%); X^2 (1, N = 164) =4.22, p = 0.04. than NIOs.

For all items, older IOs were more frequently described as having negative personality traits and behaviors than NIOs. For example, having lack of empathy (IO, 45.3% vs. NIO, 26.7%); X^2 (1, N = 173) =5.82, p = 0.02. and a lack of remorse (IO, 71.7% vs. NIO, 42.5%); X^2 (1, N = 173) = 12.55, p= 0.0004., verbal aggression (IO, 39.6% vs. NIO 25.0%); X^2 (1, N = 173) = 3.78, p = 0.051. NS. and physical aggression (IO, 39.6 vs. NIO, 21.7); X^2 (1, N = 173) =5.99, p = 0.01.

4 DISCUSSION

This study indicates that older offenders deemed criminally irresponsible can be considered as a heterogeneous population in many respects. Importantly, it was observed that one-third of the older offenders deemed criminally irresponsible were still accommodated in a prison setting where the provision of mental health care is often inadequate. Notwithstanding the descriptive design, this study revealed a number of differences between older imprisoned and non-imprisoned offenders deemed criminally irresponsible. Firstly, according to our results about the nature of offences committed at least once in lifetime, the population of older imprisoned offenders deemed criminally irresponsible was represented to a higher extent compared to non-imprisoned peers in each category. The most striking differences are related to the serious violent crimes towards others, such as homicides and sexual crimes. This discrepancy between groups may be explained by the fact that in Flanders no forensic care facilities for high-risk offenders existed at the time of this study. High-risk offenders are often not accepted in forensic care based on exclusion criteria that include psychopathy, sexual disorders, and/or sexual crimes, psycho-organic disorders, serious addiction problems, poor self-insight, and poor cognitive abilities (Baetens, 2014).

Our results indicate that most of these exclusion criteria match with characteristics that are more prevalent in the imprisoned population of older offenders deemed criminally irresponsible. Consequently, we may assume that not only the lack of available places, but

also non-corresponding client profiles reduce the treatment opportunities for older mentally ill offenders.

4.1 Demographic characteristics

Nearly 40% of the older offenders deemed criminally irresponsible were accommodated in institutional care facilities outside prisons. These facilities represent a broad variation in types of services and facilities, each with their own identity and treatment objectives. In fact, this diversity of care facilities for offenders deemed criminally irresponsible reflects the overall situation of disjointed care for forensic patients in the Flemish region, which has been described previously by Boers et al. (2011) as 'forensic care on small isolated islands'.

Only one-fourth of the older offenders deemed criminally irresponsible were $\geq$ 70 years of age, which raises the question about how the most appropriate age threshold of 'the older offender' should be defined. Age cut-offs in other publications range from 45 to 70 years, or even higher (Aday, 2005; Gallagher, 2001; Howse, 2003; Kleinspehn-Ammerlahn, Kotter-Grühn, & Smith, 2008). Researchers in favor of using lower age thresholds refer to the consequences of a harsher lifestyle characterized by a lifetime of adverse events, e.g., substance abuse, malnutrition, and unhealthy housing. This is also referred to as 'early aging' or 'accelerated aging' (Price, 2006). However, Gallagher (2001) stated that there is no empirical evidence for the generalizability of such acceleration in aging for all older offenders. Similarly, Oei & Bleeker (2003) argued that functional deterioration from a geriatric perspective, usually starts to manifest fully only during the later years of life. Whether or not accelerated aging is generally present in our research population cannot be concluded directly from our results.

4.2 Criminal characteristics

One-half of the older offenders deemed criminally irresponsible in this study had a history of at least one sexual offence and a quarter had been diagnosed with a sexual disorder. These were primarily offences committed against minors and one-fifth had committed homicides. In the main, this appears consistent with findings from Aday (2003), who stated that the majority of older males in state prisons are imprisoned for murder and sexual crimes. Fazel and Grann (2002) reported that among (new) offenders deemed criminally irresponsible ≥ 60 years of age, 25.7% and 22.9% had committed sexual offences and homicides, respectively. We found that one-third of the older offenders deemed criminally irresponsible had committed their first crime after the age of 50 years, whereas Wahidin & Aday (2010) cited in Aday (2013) found that nearly one-half of the older imprisoned offenders (≥ 50 years) were new older offenders.

4.3 Health characteristics

Physical deterioration caused by alcohol abuse is often present and may have an impact on a broad variety of health problems (NIH, 2010). These health problems were prominent in our study as well as hypertension, hypercholesterolemia, myocardial infarction, epilepsy, and diabetes, and are generally consistent with other findings involving older offenders (Colsher, Wallace, Loeffelholz, & Sales, 1992; Fazel, Hope, O'Donnell, Piper, & Jacoby, 2001; Hayes, Burns, Turnbull, & Shaw, 2012). In any event, 60.3% of the older offenders deemed criminally irresponsible in our study had experienced a problematic pattern of lifetime alcohol consumption. This is much greater than 15% of male and 12% of female older primary care outpatients in the community who regularly drank in excess of the limits as reported by Adams, Barry & Fleming (1996). Our findings are more consistent with the results of MacAskill et al. (2011) who reported a problematic alcohol consumption in 73% of the cases

among prisoners entering the prison system in general. From the same study it appeared that the older age group (40–65 years) demonstrated a more habitual and addictive drinking behavior. Other studies showed that 86% of the older offenders in a maximum security forensic hospital had a history of alcohol abuse (Rayel, 2000) and Curtice (2003) reported a rate of previous alcohol abuse in medium security of approximately 79%.

In addition to alcoholism, we found that nearly half of the older offenders deemed criminally irresponsible were labeled with a psychotic disorder. In approximately half of the population, a psychiatric co-morbidity was present. Comparing diagnostic rates is difficult because of the considerable differences in the composition of research populations in other studies. To illustrate this problem, Fazel and Grann (2002) reported that 31.4% of the older criminally irresponsible offenders (≥ 60 years of age) had psychotic disorders as a primary diagnosis; however, these offenders had been examined following crimes committed at a time when they were ≥ 60 years of age, which is not necessarily the case in our study.

Dementia was reported in 2.3% of our cases, which seems generally consistent with the pooled prevalence of dementia in the general European male population, as follows: 1.6% for 65–69 years; 2.9% for 70–74 years; and 5.6% for 75–79 years (Lobo et al., 2000). Moll (2013:p.11) stated that the prevalence of dementia among older prisoners remains largely undetermined. Again, comparisons between studies should be interpreted with caution. For example, in a population of older psychiatrically-examined offenders (≥ 60 years of age), Fazel and Grann (2002) reported a 7.1% rate of diagnoses of dementia, whereas Lewis (2006) reported a rate of 44.4%.

5 Limitations

Although this study had strengths, such as the fact that a systematic screening method was used to explore the files of a largely under-studied population, some weaknesses should be noted as well. Firstly, the comparison of our findings with other studies should be interpreted with caution, especially because inclusion criteria may differ considerably between studies according to place of residence, age threshold, whether or not a first offender, and whether or not labeled 'criminally irresponsible'. Secondly, the files that had been used in our study were specifically written for administrative juridical purposes rather than from a care or scientific perspective. In this respect we noted that some matters, such as medical issues, were not reported on a systematic basis and thus some of our findings are possibly more susceptible to underestimation.

6 Conclusion and recommendations

In this study the characteristics of older offenders deemed criminally irresponsible in Flanders have been thoroughly studied. As data proved difficult to retrieve in the non-digital case files, a standardized and broad health screening of all new entering older prisoners, with a specific focus on aspects related to aging, would be relevant (Watson, Stimpson, & Hostick, 2004). Given our findings, screening should focus on problems that often remain undetected among older offenders, such as age-related physical problems (e.g. cardiovascular disease and diabetes), physical and mental consequences of alcoholism, institutionalization, loneliness, mental health problems, intellectual disabilities, and early signs of dementia or other cognitive impairments. We would certainly recommend screening prisoners $\geq$ 50 years of age for signs of early aging. In fact, this is consistent with the idea to apply functional criteria to investigate aging in forensic populations, as suggested by Aday and Krabill (2013). We share another recommendation of the same authors, who stated that '*sensitivity must be granted to inmate*

diversity and that care must be taken to ensure the climate is one conductive to supporting all offenders into their later adulthood years' (Aday and Krabill, 2013 [p. 207]).

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