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Non-lethal Self-Harm in the Prison Environment

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Abstract

The prison environment represents a supplemental risk factor in the increased frequency of non-lethal self-harm among inmates, by comparison with the general population. The paper aims at defining the socio-demographic characters of those inmates who carried out the act by chemical means (drug intoxication or the consumption of other toxic substances) – classified as substance abuse, in contrast with the inmates who chose to act by physical means (plagues at various levels and/or ingestion of alien bodies). Between January 2009 – December 2009, 771 patients with autolytic acts were registered at the ER of the Sf. Ioan Emergency Hospital in Iași; 175 of these were inmates of the Iași Maximum Security Prison. The following variables were registered for all patients: sex, age, date of hospitalisation (the month and the day of the week are of special interest), time of the autolytic act, number of previous autolytic attempts, psychiatric disorders, method of choice, whether treatment was accepted or refused and whether the person needed hospitalisation or was treated as an outpatient. The data was processed by SPSS 10.0 for Windows. It resulted that the patients who had used mechanical means had a significantly higher average age, more frequent relapses, a maximum of hospital registrations in the months of May and February, and on Mondays. Self-injury by means of substance abuse was carried out by averagely younger patients, who had fewer relapse episodes, by whom the act was carried out most often in May and September, and on Saturdays. Regardless of the means chosen, most of these acts took place throughout the morning, when staff in charge with surveillance was present in the highest numbers. Given that numerous patients

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refuse treatment, or receive sufficient treatment as outpatients, the hypothesis takes shape that many of these acts are demonstrative.

Keywords: Suicidal behaviour; self-harm; non-lethal self-injury; substance abuse.

Introduction

Suicide and suicidal equivalents are a public health problem faced by all the states of the world, and Romania is no exception in this respect. The prison environment represents a supplemental risk factor in the frequency rise of this phenomenon among inmates, by comparison with the general population (Marzano, Ciclitira & Adler 2012; Nordentoft, 2007; Bolos, Ciubara & Chirita, 2012). Life in captivity, often with companions of deviant behaviour, associated to disciplinary measures found hard to bear by most people, determines the occurrence of certain particularities of autolytic acts inside prisons (Kerkhof & Bernasco, 1990; Lester 1998). Thus, on the one hand we are facing a rate increase of these acts, by comparison with the general population, while on the other hand, as a consequence of restricted access to various injury-inflicting means, the methods used by inmates can vary greatly (Green et al., 1992). The present paper aims at defining the socio-demographic characters of the inmates who resorted to chemical means (drug intoxication or the consumption of other toxic substances) – classified as substance abuse – in order to carry out the autolytic act, by contrast with the inmates who chose to act by physical means (plagues at various levels and/or ingestion of alien bodies). An enduring collaboration between the Prison and the C.I.R.T.I.T.A. Medical Association exists; it has materialised with the signing of a written protocol between the two entities, primarily preoccupied, at present, with the attitude towards the suicidal patient.

Material and method

Between 1 January 2009 – 31 December 2009, 771 patients with autolytic acts were registered at the ER of the Sf. Ioan Emergency Hospital in Iași. Part of these were inmates of the Iași Maximum Security Prison (N=175). Patients in state custody were split in two categories: those who had made use of chemical means (N=48) and those who had made use of physical means (plagues and ingestion of alien bodies) (N=122). Five inmate patients used both physical and chemical means of self-harm. Their group was too small to be classified as a statistically relevant one for this study. The following variables were registered for all patients: sex, age, date of hospitalisation (the month and the day of the week are of special interest), time of the autolytic act, number of previous autolytic attempts,

psychiatric disorders, method of choice, whether treatment was accepted or refused and whether the person needed hospitalisation or was treated as an outpatient. The data was processed by SPSS 10.0 for Windows, making use of frequency analysis, descriptive analysis, cross analysis (cross tabulation), average comparison tests (ANOVA, T-Test) and parametrical Chi-square tests.

Results

In the above-mentioned period, a number of 175 patients in state custody who had carried out self-injury acts were registered. All of these were male. Their ages ranged between 18 and 54, with an average of 26.69 years old and a standard deviation of 7.49 years. Among those who had abused substances, ages also ranged from 18 to 54, with an average of 25.22 years old and a standard deviation of 7.69 years, whereas the ages of those who had used mechanical self-injury means ranged from 19 to 43, with an average of 28.24 years old and a standard deviation of 6.84 years. Grouping the patients into age-based categories, one may notice a difference in their distribution, depending on the means used, illustrated by Table 1, reflected in the most crowded group, that below 24 years old for those who had abused substances, and that between 25-34 years old for the rest.

Table 1. *Data cross-tabulation age group/used method*

Age	Substance abuse		Physical abuse	
	N	%	N	%
b (18-24)	21	43,8	17	13,9
c (25-34)	19	39,6	73	59,8
d (35-44)	7	14,6	30	24,6
e (45-54)	1	2,1	2	1,6
Total	48	100,0	122	100

This difference is statistically meaningful, the calculated confidence index being $p=0.001$. Those at their first autolytic attempt were, to a greater extent, the patients who had abused substances, by contrast with those who had used mechanical means, whose relapse frequency was found to be greater. Data on relapse numbers is centralised in Table 2. The difference, though apparently high, has no statistical significance when calculating overall averages ($p=0.321$). However, calculation of two categories simultaneously shows that those using physical means had a higher relapse frequency – $p=0.047$.

Table 2. Data cross-tabulation relapse/used method

Autolytic antecedents	Substance abuse		Physically abuse	
	N	%	N	%
First attempt	44	91,7	97	79,5
An episode	3	6,2	14	11,5
Two episodes	1	2,1	5	4,1
Three episodes	-	-	4	3,3
Four episodes	-	-	2	1,6
Total	48	100	122	100,0

Lower differences in the analysis of frequency fields were registered with regard to psychiatric antecedents. These were found with 70.8% of substance abuse patients (N=34) and with 77% of the rest (N=94). Data on this variable is centralised in Table 3.

Table 3. Data cross-tabulation psychiatric antecedents/used method

Psychiatric antecedents	Substance abuse		Physically abuse	
	N	%	N	%
absent	34	70,8	94	77
prezent	14	29,2	28	23
Total	48	100,0	122	100

Processing the data by average comparison calculations confirms the fact that there are no significant differences between the two patient categories ($p=0.401$). A parallel analysis of the two groups, according to the month of hospital registration, reveals that there were two frequency peaks for each category (Figure 1): May and September for those with substance abuse; February and May for those who used mechanical means. The month of May held the maximum of cases of inmate patients with autolytic acts. The differences between the two groups are of statistical significance, $p<0.0001$.

With respect to the day of the week when the hospital registration took place, there is a certain similarity of distribution (we mention that the inmates who chose mechanical means had a maximum of registration numbers on Mondays), with an obvious difference during weekends (Figure 2).

While those with substance abuse did not happen to register on Fridays and peaked on Saturdays, with a decrease on Sundays, those with mechanical self-injuries had a minimum of registrations on Saturdays. The difference is of statistical significance, the confidence index being $p<0.0001$. Figure 3 illustrates data on the time of registration for each group and for all patients.

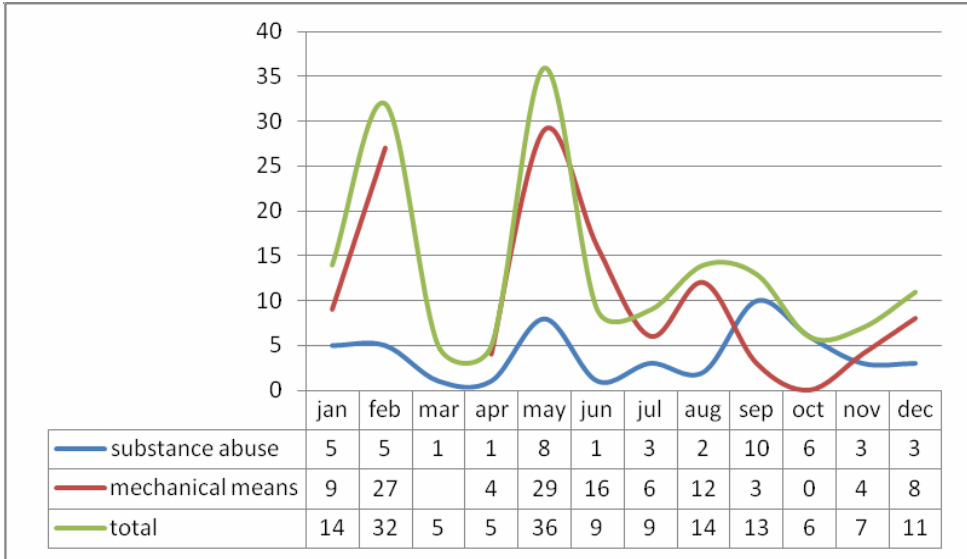


Figure 1. *The analysis of submissions per month depending on the chosen method*

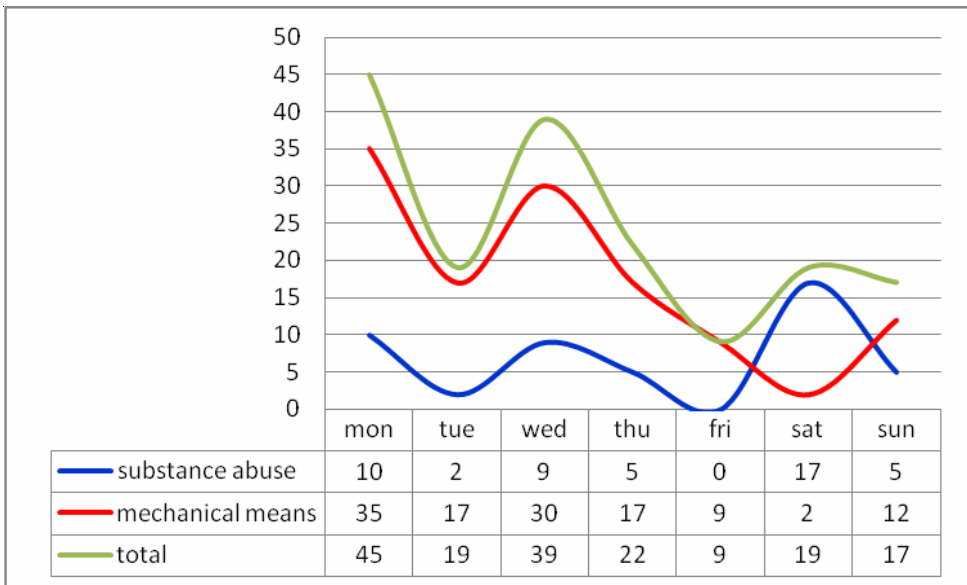


Figure 2. *The analysis of submissions per day depending on the chosen method*

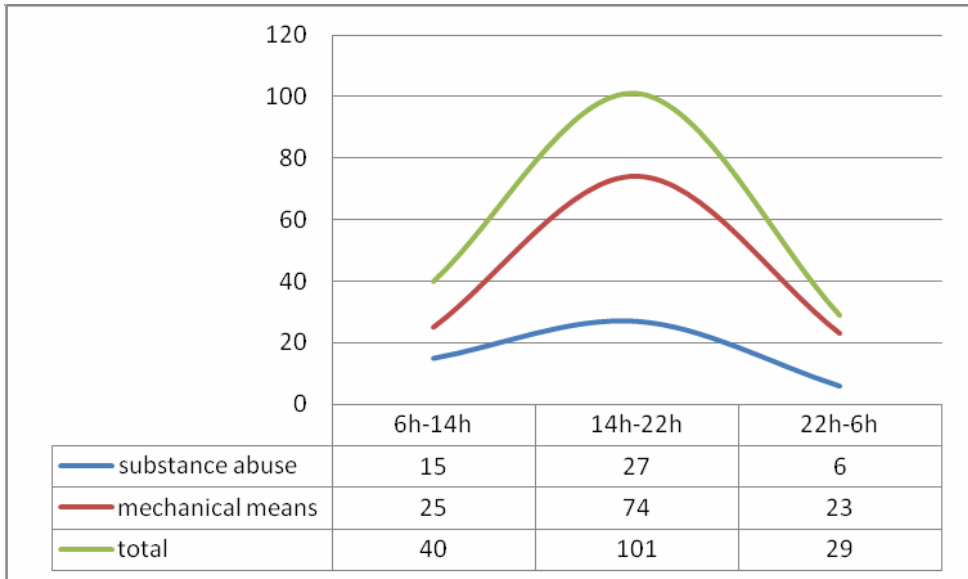


Figure 3. The analysis of submissions on hour intervals depending on the chosen method

The obvious peak time is between 14:00-22:00, with fewer registrations in the morning and at night. Average comparison calculations confirm a lack of significant differences between the method of self-injury and its time frame ($p = 0.273$). There is a tendency, for part of the patients with autolytic attempts, to refuse treatment. 22 such refusals were registered among the inmate patients (12.6%), distributed as follows (Figure 4): 6 had abused substances (12.5%) and 16 had chosen mechanical self-injuries (13.1%). The difference is small and of no statistical significance ($p=0.915$). 47.91% ($N=23$) of the substance abuse patients could be treated as outpatients, whereas 39.6% ($N=19$) needed hospitalisation. At the same time, 54.91% ($N=83$) of the patients who had inflicted mechanical self-injuries were treated as outpatients, while 32% ($N=39$) were hospitalised. The difference between the two groups, observable in Figure 5, is of almost 9.0%; however, it does not reach the limit of statistical significance ($p=0.349$). None of the patients needed ATI hospitalisation.

Discussions and conclusions

Non-lethal self-injury is a behavioural disorder insufficiently studied in a systematic manner. Additionally, the databases regarding the psychological and pharmacological treatment of such patients are insufficient and uncorroborated. Together with producing surface plagues, ingesting substances – medicinal, in

most cases - is the most widespread method of carrying out these autolytic acts (Nock 2010). The scarcity of studies may be caused by a superficial approach of such patients that only takes into account the fact of coercing those around to offer these people more attention, but neglects the equally relevant fact that these patients really require their entourage and society to focus on their needs. A high frequency of autolytic acts has been noted among inmates, by comparison with the general population, a statement sustained by statistical data. Thus, Iași Prison has in its custody a constant number of inmates, ranging between 1250 and 1270, with an average of 1260.139 patients registered for autolytic acts show a 13.8 percentile of this phenomenon. The rest of the patients, part of the general population, registered at the hospital during the same period, are to be compared with the active population of Iași County. The official data offered by the Iași County Statistics Centre refers to the population aged 15-59, an age range similar to that inside the prison, the total value for this category being 542,000 citizens, corresponding to a 95 percentile to every 100,000 citizens. Put simply, this means that the autolytic phenomenon was 115 times more frequent in the prison environment than with the general population. Additional differences from the general population were registered in what concerned treatment refusal, hospitalisation necessity and ATI hospitalisation necessity, all of these being more frequent with the general population. This results in the conclusion that inmates produced less severe self-injuries and accepted treatment to a greater extent. It has been found that the patients who used mechanical means had a significantly higher average age, were more prone to relapses, had peak registration numbers in May and February, and on Mondays. Self-harm by substance abuse was produced by younger patients, who were less prone to relapses and who had peak registration numbers in May and September, and on Saturdays. Regardless of the method of choice, most of these acts took place in the morning, when staff in charge of surveillance was present in the highest numbers; the hypothesis takes shape that many of these acts are demonstrative (Haycock 1989; Fruehwald, Frottier, Matschnig & Eher, 2003). Although most papers focused on this issue determine a close connection between self-harm and mental disorders, in our study lot disorder frequency was diagnosed at 24% of inmates (with a higher percentage for those with substance abuse – 29.2%, than for those that used mechanical means) (Ciuhodaru, Iorga & Romedea 2012; Farmer, Felthous & Holzer, 1996).

The period of imprisonment includes educational and counselling sessions. The inmates' participation in these has rendered positive results, contributing to sentence reductions or other benefits. The purpose of these sessions is to prove that the inmate has been re-educated and redeemed. Promoting mental health inside prisons offers benefits to the inmates (Whitehead 2006; Harris, Hek & Condon 2007), to the staff and also to the general community. Starting from the assumption that the ultimate aim of the system is to reintegrate the individual into

society, the protection of his mental health increases the possibility of a proper readaptation within his community after serving his sentence, and reduces the possibility of a relapse. Consequently, this fact offers benefits to the community, by reducing the risk of new felonies, the number of those who return to prisons and, implicitly, the running costs of these institutions.

For these reasons The Council of Europe, The United Nations Basic Principles for the Treatment of Prisoners or The Moscow Declaration on Prison Health as a part of Public Health (2003) have strongly recommended that closer links be made between prison and public healthcare.

- The Moscow Declaration on Prison Health as a part of Public Health (October 2003) noted that Member governments are recommended to develop close working links between the Ministry of Health and the ministry responsible for the penitentiary system so as to ensure high standards of treatment for detainees, protection for personnel, joint training of professionals in modern standards of disease control, high levels of professionalism amongst penitentiary medical personnel, continuity of treatment between the penitentiary and outside society, and unification of statistics.
- The Council of Europe Recommendation No. R (98)7 of the Committee of Ministers to member states concerning the ethical and Organizational aspects of health care in prison: The role of the ministry responsible for health should be strengthened in the domain of quality assessment of hygiene, health care and Organizations of health services in custody, in accordance with national legislation. A clear division of responsibilities and authority should be established between the ministry responsible for health and other competent ministries, which should co-operate in implementing an integrated health policy in prison.
- The UN Basic Principles for the Treatment of Prisoners indicate how the entitlement of prisoners to the highest attainable standard of health care should be delivered, *Under Principle 9: "Prisoners shall have access to the health services available in the country without discrimination on the grounds of their legal situation"*.

There are, however, particular explanations behind suicide attempts, especially those with demonstrative purposes. Suicide usually occurs in the foreground of mental disorders or illegal substance consumption. The Regional European Centre of the World Health Organisation (WHO) estimated that, in European countries, in 1998, up to 32% of inmates suffered from mental disorders, excluding those disorders caused by substance abuse. By including the latter, the percentage rose to 63%. Most inmates suffer from personality disorders (especially from antisocial personality disorders).

Increased comorbidity was reported among the symptoms of mental disorders, addiction to or abuse of drugs or alcohol. Between 28 and 49% of inmates featured both a mental disorder and a substance addiction or abuse (Fazel, Bains & Doll, 2006; Bushnell & Bakker, 1997; Fruehwald et al. 2004).

Conclusions

In the prison environment, the most frequently encountered comorbidity is represented by emotional disorders, primarily by the antisocial personality disorder (Abram & Teplin, 1991; Woldredge 1998). With regard to alcohol and drug consumption, the same study revealed the fact that between 63.6% and 76.4% of inmates were addicted to or abusing such substances. An evaluation of suicide risk must be carried out in a team, by using information from several sources – the family, guardians, the general practitioner, nurses. Additionally, provided that the suicide risk fluctuates with the passing of time, the evaluation must be carried out periodically.

When we refer to the main categories of inmates with a predisposition to suicidal acts, there are certain risk factors that must be taken into account (Carli et al., 2011): those on remand for the first time, those who were trialled and got a longer sentence than expected, or those whose status recently changed (from being on remand to serving a sentence) (Ciuhodaru, Iorga & Romedea, 2012); those with a history of suicide attempts (Farmer, Felthous & Holzer, 1996); those with a history of mental disorders (especially depression or psychoses) (Green et al. 1992); those with a history of abusive alcohol or drug consumption (Marzano, Ciclitira & Adler, 2012); those that suffer from chronic or very painful physical illnesses (Nock 2010); those condemned for murder or sexual offenses (Nordentoft, 2010); those with communication difficulties and very weak coping mechanisms (Sakellidis et al., 2010); those with a history of sexual assault or sexual abuse (Stewart, 2007); those who have been socially isolated, both within and without the prison.

With respect to the Romanian prison environment, the epistemological data is extremely scarce. According to a report of the National Anti-Drug Agency (ANA, 2006), 14% of the interviewed inmates consumed drugs in detention without consulting a physician. Of these, 36.7% consumed benzodiazepine or other substances with effect on the central nervous system, 18.5% consumed illegal drugs at least once during their lifetime, and 2% consumed illegal drugs during their imprisonment.

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