

## Self-harm in the prison system

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**Abstract:** Self-harm is a much more common pathology within the prison environment than outside of this, so much so that it can be considered specific to it. For 7 years, in the biggest prison hospital in Romania, self-harm was present in 5% of the hospitalized patients, with a total of 762 cases. The mechanisms of self-harm were the ingestion of foreign bodies (63%) and the insertion of foreign bodies in: the soft parts (19%), intracranially (6%), intraabdominally (2%) and intrathoracically (2%). Metal bodies are the most commonly used in self-harm (over 90%). The self-harm technique is learnt from the inmates with a history of such incidents. The mortality is low (0.4%), refusal of treatment is found in 13% of cases, and recurrence of self-harm is common where the ingestion and intracranial insertion of foreign bodies occurs (42% -50%). Mental disorders, dominated by personality disorders, are found in 46% of patients.

**Key Words:** self-harm, foreign body.

Self-harm is a non-fatal action where a person deliberately causes an injury to himself/herself, or ingests foreign bodies or larger amounts of substances than the therapeutic doses or prescriptions. The action is clearly intentional, without knowing whether a death wish was present or not [1].

Self-harm during imprisonment is more common than outside of the prison system or in the psychiatric wards. Besides mental disorders, the increasing frequency of self-harm could only be explained by the prison environment – stressful, in want, rigid, crowded, marked by violations of the rights of those in custody; in other words, detention is too restrictive and offers little in terms of education and occupations, and thus it is unable to prevent recidivism. Seen in this context, self-harm is a form of protest, a means of getting a decent treatment in prison, but also a form of manipulation to obtain undue secondary benefits, and a pathological form of freedom of expression.

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### MATERIALS AND METHOD

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This article is based on 762 different cases of self-harm, gathered over 7 years (2003-2010), in the largest prison hospital in Romania, and they represent between 4-6.5% of all the admissions during that period. The study of this material was both retrospective and prospective (2003-2006 respectively 2007-2010) on the following criteria: the mechanism of self-harm, foreign bodies used, injured anatomical areas, self-harm technique, mortality, patient profile, refusal of treatment, recurrence of self-harm.

#### *The mechanism of self-harm*

There are two main mechanisms of self-harm: ingestion of foreign bodies and their insertion into the body (the insertion can be subcutaneous, intracranial, intrapneumonic, intrathoracic and intraabdominal). Other

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less common mechanisms during the aforementioned period, but more common before 2003, are the insertion of biological products (urine mixed with saliva) into the soft parts and the intraocular insertion of foreign bodies.

In order of frequency, the self-harm mechanisms were: the ingestion of foreign bodies - 63% (472 patients), the insertion of foreign bodies: soft parts - 19% (143 patients), intracranial - 8% (65 patients), intrapenian - 6 % (48 patients), transparietal intraabdominal - 2% (17 patients) and intrathoracic - 2% (17 patients).

#### **Foreign bodies utilized in self-harm**

Self-harm was done using a wide range of foreign bodies, predominantly metallic ones as they are most available in the daily activity of the prisoner (cutlery - most common, nails, wires, screws, flat strips of metal, furniture components etc.). The metal foreign bodies are preferred also because they can be altered by rubbing them on stone or other heavy metal objects (bars, metallic elements of the bed, etc.), thus obtaining various shapes and sizes one can use when inflicting the injuries.

Next in order of frequency are plastic bodies, those of a metal-plastic mix and glass. Specific to self-harm at the penis level is the use of fatty substances (ointments for external use).

In prison, there is access to knowledge related to self-harm – about the type of foreign bodies used in different self-harm mechanisms so as not to get to surgery, about how to behave after inflicting self-injuries – as it is transmitted from one prisoner to another, usually from the repeat offenders to the others. Thus, while in the case of voluntary ingestion different foreign bodies (made of metal, plastic, glass etc.) are used, for transparietal insertion only metal objects are utilized, with different features depending on the structures that must be penetrated. For self-injuries inflicted by insertions that are subcutaneous transparietal, intrathoracic and intra-abdominal, they use thin, pointed and elastic metallic foreign bodies (needles and wires of different lengths, with sharpened ends they obtained by friction); these

can penetrate relatively easy the cutaneous barrier with its receptors for pain. In the intracranial insertion, they use metal bodies which are sharp, rigid, relatively short, features necessary to penetrate the skull (thicker nails or needles).

Four hundred and seventy-two patients ingested a total of 1175 foreign bodies; out of these 1081 (92%) were made of metal, 56 (4.7%) of plastic, 33 (2.8%) of a mix of metal and plastic, 3 of glass and 2 of wood.

#### **Body parts where self-harm was inflicted**

Most foreign bodies are inserted in the soft tissue of the upper limbs and the neck; the next in order of frequency are the abdominothoracic wall and the pelvic limbs. Out of the 143 subcutaneous insertions 39 (27.27%) lesions, and respectively 37 (25.87%) were located on the first two areas mentioned above.

With the skull, the injuries are almost entirely in the frontal region (85%), an area that is easily accessible to the patient; there is also the possibility of maintaining the cutaneous and/or osseous orifice for subsequent attempts. Self-harm rarely occurs in the other regions of the skull - only 4 lesions from our cases were in the parietal region. This shows a desire not to inflict fatal damage, as they know that the mediofrontal region is a relatively “safe” area for the insertion of foreign bodies.

With the penis self-injuries, foreign bodies are inserted in the foreskin or penile sheath. The intrapenian insertion of foreign bodies, initially for aesthetic reasons and for increased sexual ability, most often ends with damage and synechia that are extremely difficult to treat.

The transparietal insertion is more common in the right hemicorpus than the left one, probably because the patients are right-handed and because the inmates know that lesions of the left hemicorpus (where the spleen and the heart are) have potentially higher unfavorable evolutions than lesions in the right hemicorpus. Thus, in cases of transparietal intraabdominal insertions, in 9 cases (52.94%) the foreign bodies were located in the



Figure 1. Ingested foreign bodies.

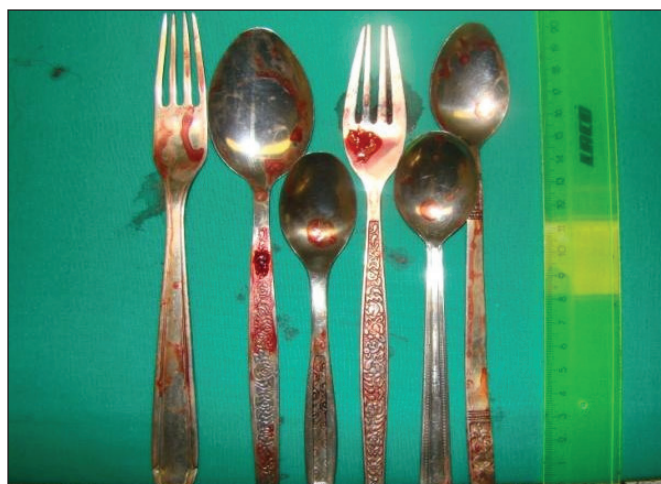


Figure 2. Ingested foreign bodies.



Figure 3. Oral pharyngeal esophageal foreign body.

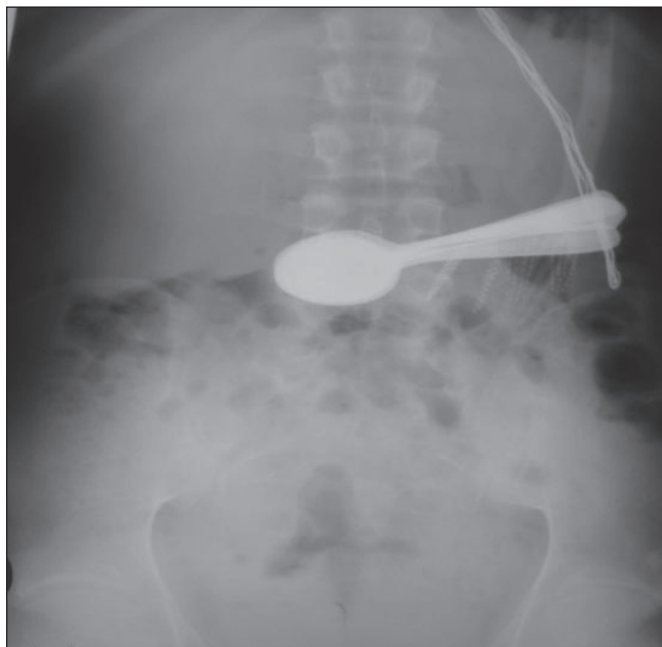


Figure 4. Intra-gastric foreign bodies.



Figure 5. Intracranial foreign body.



Figure 6. Penis lesion after inserting oily substance .

right hepatic lobe, and only in 3 cases (17.64%) in the left lobe or the spleen. In the case of thoracic self-injuries the lesions were mostly in the right hemithorax - 12 cases (70.58%).

**The self-harm technique**

For voluntary ingestion, the foreign bodies are rubbed with different fat substances in order to get them through the pharynx more easily; the patient's head is extended so as to align the mouth as much as possible to the pharynx. Subsequently small balls of cotton can be ingested to make swallowing easier, especially when large foreign bodies are involved.

With subcutaneous insertion, the sharp foreign body is inserted obliquely until it crosses to the other side of the skin, then it is oriented in the axis of the abused area.

Intracranial insertion is usually done with the assistance of a colleague who practiced or witnessed this before. There are two insertion methods: the first consists of fixing the foreign body by hand on the penetration spot and then repeatedly hitting the wall; the second involves

hitting the foreign body which is held in place with a hard object. Once the skin and / or heavy bone are penetrated, some patients maintain the orifice in order to inflict the self-injury again.

For intrapenian insertion they make small incisions, corresponding to the dimensions of the foreign body, at the skin level of the foreskin or of the penis sheath, then they insert the objects. After that they inject oily substances once they have heated them.

The transparietal insertion of foreign bodies usually starts at the base of both hemithoraces; the sharp-ended needle or wire penetrates through the rib cage to the thoracic or abdominal viscera as the patient is in apnea. They also commonly use the axillary line, with no explanation for this. There are also situations in which the foreign body is inserted through the chest or the anterior abdominal wall.

There was a 0.4% mortality rate (3 cases), death occurring in patients who ingested foreign bodies and complications appeared when the digestive tract was perforated.



### *The profile of the person who inflicts self-harm*

The distribution by age groups shows the predominance of patients in the third and fourth decades of age; they represent 79% of all patients, corresponding to the majority population in prisons. The two age groups are the majority for all types of self-harm, except subcutaneous insertion of foreign bodies, more frequent among minors.

The distribution by gender shows that self-injury is predominant in men. A small number of women have resorted to self-harm by ingestion of foreign bodies (16 cases - 3.38%).

### *Motivation of self-harm*

As the gesture is clearly voluntary, there are various reasons behind it. To the extent that these reasons can be discovered, they can be: changing the prison to be closer to family, changing the room to avoid physical or sexual attacks, admission to medical ward where the imprisonment conditions are better and the staff more lenient, getting furlough for a death in the family.

### *Refusal of treatment*

There is a significant percentage of self-harm patients who, once they are admitted to the hospital, refuse investigations and/ or treatment. In this case, the patients are discharged if they have no symptoms or lesions that are not life-threatening (especially foreign bodies with subcutaneous, intrathoracic, intra-abdominal, intrapneumonic insertion); some of them are supervised until they change their mind or, in case their general health condition worsens, until the medical team makes the correct medical decision.

There were 99 patients (12.99%) who refused treatment when admitted, most of them (71) with voluntary ingestion. The approach towards them (except one) was discharge on request, as they were not emergencies. 23 of them presented with natural elimination during subsequent check-up; 9 of them were operated on when admitted again; for 6 of them the treatment was nonsurgical (EDS or endoscopy associated with natural elimination); for 32 of the patients the follow-up was not performed. The exception was represented by a patient with voluntary ingestion and localized peritonitis, who initially refused surgery; 4 days later, as his general health status worsened, the patient's will was ignored and he was operated on.

When treatment was refused after self-harm by intracranial insertion of foreign bodies, there were 7 patients who initially refused treatment; 4 changed their mind during hospitalization, 2 have removed the foreign bodies themselves (one after he was discharged on request), and the last one was discharged and no follow-up was done.

Other self-harm patients who refused treatment (21 in total - 12 self-injuries by inserting foreign bodies into soft parts, 8 into the penis, one with intra-abdominal transperitoneal insertion) were discharged on request and

there was no follow-up for these cases.

Self-harm relapse differs according to the mechanisms. The mechanisms with the highest incidence of repetition (sometimes even during hospitalization for the same type of self-harm) are intracranial insertion (50.76%) and ingestion (42.16%). These self-harm modalities are easily reproducible; the patient can repeat the gesture whenever he wants and in any conditions. In case of intracranial insertions of foreign bodies, the lesions are more superficial, since they keep the initial penetration hole, thus they are less painful and with less sequelae, generally speaking. With foreign bodies reingestion one also can see simulation cases, when the prisoners state they have repeated the gesture so they can get sent back to the hospital. The prisoners with a history of self-harm threaten to repeat the gesture, as they know the impact it has on the authorities, in order to obtain various benefits.

### *Psychiatric disorders and self-harm*

Psychiatric exams were systematically done between 2007-2010; with the 312 cases that were examined, the following types of psychiatric pathology were mainly found: antisocial personality disorder (94 cases), polymorphic personality disorder (50 cases), mental retard with behavioural disorders (30 cases).

In addition to the cases above, there are 50 more cases with a history of ethanol abuse and drug use (mainly heroin).

One can notice the maximum incidence of patients with antisocial disorder, an aspect specific to self-harm patients who are imprisoned, as self-harm is not a defining, essential characteristic for the antisocial psychopath, according to the data from psychiatric literature.

Since most self-harm patients have psychiatric disorders, they are easily influenced by peers with a self-harm history, who initiate them. Those who do this for the first time are not aware of the amplitude of the negative effects self-injuries can generate, as they are only presented with the 'benefits'.

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## DISCUSSION

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Self-harm is a pathology that is more common in prisons than the usual medical environment [2-4], with an incidence of approximately 5% of the total admissions in the Romanian hospitals. Although during the study period the number of prisoners has decreased considerably (- 30% between 2010 and 2003), the absolute value of self-injuries remained relatively constant, standing at values of 0.34 to 0.4% of all inmates. We conclude that the incidence of self-harm is not directly related to overcrowding in prisons at a certain time. The incidence of this pathology differs from the existing literature, which reports values ranging between 0.05% among the prison population in the US and over 5% in England and Wales [2, 3].

The main self-harm mechanisms are ingesting and introducing foreign bodies in different anatomical regions. The self-harm types differ from the existing data regarding the prison population in the US, where most self-injuries consist of cuts (34%), self-suture (28%), ingestion of foreign bodies (15%), etc. [2, 5]. The foreign bodies used in self-harm are generally made of metal, and are usually objects used in daily activities (especially cutlery). The self-harm technique is learnt in prison. The low mortality rate confirms the 'efficiency' of the self-harm methods, which are not meant to be lethal. As they are a challenge to the prison system, self-injuries are accompanied by numerous complaints from inmates towards the medical staff, which quite often lead to lawsuits. Males are overwhelmingly involved in self-harm, unlike the English and American prison systems, where women resort to self-harm and men to suicide [2-5].

As it is practiced mostly by patients with psychiatric disorders, who sometimes also have a history of alcohol and/ or drug abuse [4], self-harm aims to obtain personal advantages within the prison system (hospitalization, better imprisonment conditions etc.). Antisocial personality disorders are often associated with self-harm in prison, which is not the case outside of the

prison environment. Existing data show that 1/3 of self-harm patients have a history of self-harm and psychiatric disorders that predate their incarceration [2, 3]. The risk factors which contribute to the increased incidence of self-harm are: the imprisonment duration, pre-existing psychiatric disorders, race, age, isolation [2, 3]. This last factor contributes to a 6.9 higher rate of self-harm compared to the rest of the prison population [2].

There are conflicting data about the possibility of a predictive score for self-harm / suicide. Thus, while authors from the UK use a psychometric instrument (SCOPE) designed to distinguish between those at risk and those with no risk of self-harm [7], other authors refute this possibility [6, 8].

The standard profile of a self-harm patient is: a 30-50 years old man, an antisocial psychopath that in half of the cases will repeat the gesture, most likely ingestion or intracranial insertion of foreign bodies, in order to obtain certain advantages within the prison system.

**Conflict of interest.** The authors declare that they have no conflict of interest concerning this article.

**Acknowledgement.** All authors had an equal contribution in designing and writing the presented paper.

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