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Original article

Self-injurious behavior among Greek male prisoners: Prevalence and risk factors

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Abstract

Background: Self-harm among prisoners is a common phenomenon. This study aims to estimate the prevalence of self-injurious behavior (SIB) among Greek male prisoners, record their motives and determine independent risk factors.
Methods: A self-administered, anonymous questionnaire was administered to 173 male prisoners in the Chalkida prison, Greece. The questionnaire included items on self-harm/SIB, demographic parameters, childhood history, family history, physical and mental disease, lifestyle and smoking habits, alcohol dependence (CAGE questionnaire), illicit substance use, aggression (Buss–Perry Aggression Questionnaire [BPAQ] and Lifetime History of Aggression [LTHA]), impulsivity (Barrat Impulsivity Scale-11) and suicidal ideation (Spectrum of Suicidal Behavior Scale). Univariate nonparametric statistics and multivariate ordinal logistic regression were performed.
Results: Of all the participants, 49.4% (95% CI: 41.5–57.3%) disclosed self-harm (direct or indirect). The prevalence of SIB was equal to 34.8% (95% CI: 27.5–42.6%). Most frequently, SIB coexisted with indirect self-harm (80.7%). The most common underlying motives were to obtain emotional release (31.6%) and to release anger (21.1%). At the univariate analysis, SIB was positively associated with a host of closely related factors: low education, physical/sexual abuse in childhood, parental neglect, parental divorce, alcoholism in family, psychiatric condition in family, recidivism, age, sentence already served, impulsivity, aggression, alcohol dependence, self-reported diagnosed psychiatric condition and illicit substance use. Childhood variables were particularly associated with the presence of diagnosed psychiatric condition. At the multivariate analysis, however, only three parameters were proven independent risk factors: self-reported diagnosed psychiatric condition, illicit substance use and aggression (BPAQ scale).
Conclusion: The prevalence of SIB is particularly high. Psychiatric condition, illicit substance use and aggression seem to be the most meaningful risk factors; childhood events seem only to act indirectly.

Keywords: Self-injurious; Prisoners; Greece; Psychiatric; Child abuse; Aggression

1. Introduction

Self-harm is a broad notion describing acts at the antipodes of self-care, as described by Claes and Vandereycken. Self-harm may be direct or indirect, may entail the intention to die (consequently referred to as suicide attempt) or not [8]. Self-injurious behavior (SIB) is a term defined as ''direct'' self-harm acts ''without'' the intention to die [8,4,44]. SIB may be severe or not; severe SIB cases, such as eye enucleation, castration and amputation of body parts have been defined as self-mutilation (SM). SIB is one of the most perplexing clinical phenomena and acts of SM vary greatly and depend on the imagination of the self-mutilator. It may include cutting, burning, inserting objects, head banging, interfering with wound healing or hitting oneself [4]. It is obvious that despite the lack of direct intent to commit suicide, repetition of such acts may be extremely dangerous or even lethal.

Several studies have been conducted concerning prevalence, mode and motives of SIB and SM in the general population [4,13,27], psychiatric population [4,24,17], adolescents and children [17,34,36]. High rates of major depression, anxiety, substance abuse, posttraumatic stress disorder, eating disorders, schizophrenia [44], dissociative disorder [4], impulse control disorders, mental retardation and other organic conditions [39] have been observed among self-mutilators. SIB may also be found in patients with diagnosis of personality disorders [23]

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especially antisocial personality disorder [40] and borderline personality disorder [38,3].

SIB among prisoners is a quite common phenomenon [3,18]. Inmates have been shown to engage in such activities more frequently that the general or psychiatric population [14,28]; as a result, efforts have been recently made to detect self-harm behavior in prisoners through special tools [31]. Nevertheless, the risk factors for SIB in prison remain an open field, as SIB seems to integrate a host of factors. Psychiatric conditions, such as presence of Axis II borderline personality disorder [43], borderline, negativistic and antisocial disorders may predict deliberate self-harm in male offenders [29]. History of being a victim of violence (physical assault, sexual assault and violence from family and friends) correlates with self-harm in female prisoners [3]; maltreatment seems to do so in male offenders [29]. Interestingly enough, drug [43,5] and alcohol abuse [3,5] have been also associated with self-harm in prison. Assessing whether all the above, occasionally reported, factors are capable of mediating independent effects upon SIB prevalence in prison is a research question of considerable importance.

A high prevalence of psychiatric disorders (including deliberate self-harm) has been shown among Greek prisoners [15]. The problem becomes even more complicated by the fact that prison doctors in Greece have little or no psychiatric training and a regular and close follow-up by mental services and psychiatrists is not provided. Moreover, such acts are often considered as ''manipulative'' and are underestimated.

Under the light of the above, the aim of our study is:

- to estimate the prevalence of SIB among male prisoners;
- to record their motives and;
- to determine independent risk factors for SIB in prison.

Sociodemographic factors, early childhood events, personality traits, alcohol and substance abuse, as well as prison-related variables are evaluated, in an attempt to globally assess the intricate underlying associations.

2. Subjects and methods

2.1. Setting and subjects

The Chalkida prison, where this survey was conducted, is a male remand and sentence prison located in Central Greece. Prisoners have been convicted for a wide range of offences and the sentences range from a few months to life imprisonment. Reported (from the prisoners) reasons of their admission consisted of murder or serious injury (17, 10.4%), theft or robbery (57, 34.7%), fraud (38, 23.2%), illegal drugs (38, 23.2%) and other (14, 8.5%). Prisoners may be transferred there, as in any other Greek prison, from any geographical area in Greece. Approval from the Ministry of Justice was obtained for the survey.

2.2. Structure of the questionnaire

A self-administered, anonymous questionnaire, taking between 20 and 30 minutes to complete, was administered to 173 prisoners. Written informed consent was obtained before the administration of the questionnaire. The purpose of the study was thoroughly described and the voluntary nature of participation emphasized as part of the consent procedure. The participants were also informed that they could stop their participation at any time and that there were no prison-related benefits or penalties for their participation. The prison doctor was responsible for the whole procedure, as well as for the maintenance of the confidentiality. In case that a prisoner was not able to read and fill in the questionnaire himself (because he was an analphabet or a foreigner), the questionnaire was filled in by the prison doctor after a face-to-face interview.

The questionnaire included items on:

- sociodemographic parameters (sex, age, marital status, education and ethnicity);
- childhood history, family history, physical and mental disease, lifestyle and smoking habits;
- alcohol dependence and illicit substance use (ever-use) and;
- aggression, impulsivity, suicidal ideation and self-harm.

More specifically, alcohol dependence was estimated by using the ''CAGE questionnaire'', a brief screening instrument containing four short questions:

- have you ever felt you should *cut* down on your drinking?
- have people *annoyed* you by criticizing your drinking?
- have you ever felt bad or *guilty* about your drinking? and;
- have you ever had a drink in the morning to get rid of a hangover (*eye*-opener)?

The CAGE questionnaire (CAGE: acronym formed from the words cut-annoyed-guilty-eye) was developed from a clinical study performed in 1968 by Ewing at the North Carolina Memorial [12]. The score was created, as follows: each item can have either a ''yes'' or ''no'' response. If the answer was ''yes'', one point was added; in case the answer was ''no'', no points were added. Consequently, the resulting score ranged between 0 and 4. CAGE has demonstrated high test-retest reliability (0.80–0.95) and adequate correlations (0.48–0.70) with other screening instruments. The questionnaire is a valid tool for detecting alcohol abuse and dependence, especially in medical and surgical inpatients, ambulatory medical patients and psychiatric inpatients (average sensitivity 0.71, specificity 0.90) [10].

Hostility and aggression was assessed by using the Buss–Perry Aggression Questionnaire (BPAQ), a 29-item questionnaire containing brief statements (e.g., sometimes I can't control my urge to strike another person) to which a number ranging from 1 to 5 should be assigned (1 = Not like me at all and 5 = A lot like me). Retest reliability for the BPAQ over 9 weeks is also satisfactory (correlations ranged from 0.72 for anger to 0.80 for the total score [7]). Construct validity for the Buss–Perry questionnaire is supported, to some extent, by its relative associations with other self-report measures of personality traits [7,16,20].

The Brown–Goodwin Lifetime History of Aggression (LTHA) subsumes nine questions concerning aggression