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SELF-INJURIOUS BEHAVIORS IN PRISON. A REVIEW OF THE STATE OF THE ART

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Traditionally, self-injurious behaviors have been considered as symptoms of a disorder and, in most studies, they have been studied in relation to the presence of a disorder with which they are associated. Similarly, there are few studies that suggest the study of these behaviors in relation to the environment in which they occur (in the context of the community, prison, mental institution, etc.). The focus in the study of self-injurious behaviors linked to the definition of a disorder with which they are related has, in our opinion, made it difficult to compare and develop a deeper understanding of the characteristics that define these behaviors, as in most cases they have been understood from the perspective of psychopathology and not as a separate entity. Thus, this paper proposes a comprehensive review of the different definitions of self-injurious behaviors and the main studies both in the community and in prisons, focusing our attention on the properties and variables identified on the basis of these definitions.
Key words: *Self-injurious behavior, Prison, Psychopathology.*

Tradicionalmente, las conductas autolesivas han sido consideradas como síntomas de un trastorno; por lo que en la mayoría de los estudios, se han estudiado en relación con la presencia de trastornos a las que asociarlas. De este modo, son pocos los estudios que proponen el estudio de estas conductas en relación con el entorno y medio en el que ocurren (en el medio comunitario, prisión, institución psiquiátrica, etc.). El enfoque en el estudio de la conducta autolesiva ligada a la definición de algún trastorno con las que se las relaciona ha dificultado, en nuestra opinión, la comparación y la profundización de los rasgos definitorios de estas conductas, puesto que en la mayoría de los casos se han entendido desde la perspectiva del trastorno psicopatológico y no como una entidad propia. Así, en este trabajo se propone una exhaustiva revisión de las distintas definiciones de las conductas autolesivas, así como de los principales estudios tanto en el ámbito comunitario como en el penitenciario, centrando nuestra atención en las propiedades y variables identificadas a partir de esas definiciones.
Palabras clave: *Autolesiones, Prisiones, Psicopatología.*

Throughout existence, humans have shown a broad sample of aggressive behaviors in different situations and with different objectives and motivations. In situations of danger, these behaviors have a high adaptive value for survival, whereas in other situations they are sometimes regarded as maladaptive, and in others they are deemed unacceptable. In the latter case, each society has given different answers to isolate, punish and modify these behaviors. However, there is a group of aggressive behaviors, the self-injurious and suicidal, which are more difficult to address because they do not have an adaptive or survival function. The difficulty in understanding these types of behavior has led to the absence of models, both theoretical and practical, for their understanding, intervention and evaluation, despite the fact that they are one of the most problematic behaviors generated in the emergency units of hospitals (Garcia Velasco & Martínez Cordero, 1994) and in prisons (Roca, 2009).

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DEFINITION AND CLASSIFICATION OF SELF-INJURIOUS BEHAVIORS

The definition and delimitation of what we understand as –or what can be considered as– a self-injurious behavior is not easy. First of all, within the scientific literature various different words are used to describe these behaviors, such as self-mutilation, self-harm, parasuicides or suicide attempts, among others. Clearly, all these terms refer to either the results of the behavior or the intentionality, regardless of the type of self-harm or severity. Thus, each author has carried out their studies using their own definition, making it difficult to compare

and generalize the results of the different studies. Consequently we find a number of studies that either focus on a very specific type of self-harm, or include a wide range of behaviors (including suicidal behaviors), which means heterogeneous behaviors are included in the same category and there are no studies that clearly justify their inclusion in the same category of analysis.

RELATING TO THE DEFINITION OF SELF-INJURIOUS BEHAVIOR

The most general definition of self-injury is the deliberate destruction of body tissue without conscious suicidal intent (Chapman, Gratz, & Brown, 2006; Favazza, 1989; Favazza, Simeon, & Rosenthal, 1993; Pattison & Kahan, 1983; Winchel & Stanley, 1991). This definition, despite being the most cited, has been criticized in relation to a number of aspects. Firstly, it defines self-harm with the exclusion of suicide, and this exclusion is based solely on the intentionality of the behavior, which is entirely internal to the subject and, therefore, difficult to measure reliably. Moreover, it leaves out all kinds of self-injurious behavior, such as swallowing foreign objects (batteries or nails, for example) or the voluntary dislocation of limbs (Barr, Leitner & Thomas, 2007). Besides, this definition may include other behaviors such as tattoos or piercings that have an important cultural component, whose inclusion in the category of self-harm only serves to contribute more confusion and difficulties in generalizing the results (Suyemoto, 1998). Another definition of self-harm is referred to as the direct and repetitive physical self-harm that does not endanger the life of the person (Herpertz, 1995; Scharfetter, 1992). In cases of serious self-harm the risk to life can be high, although this is not the intention of the subject and, therefore, most studies do not include these people who, on a qualitative level, are the most important are because they are the ones that present a higher risk and therefore, the group of people in which intervention is necessary to prevent further self-harm. Within this category self-injurious behavior can be understood as parasuicidal behavior that is performed without the intention to cause death (Chapman, et al, 2006; Kreitman, 1977). Other authors, such as Babiker and Arnold (1997), stress that the difference between suicidal behavior and self-injurious behavior is that the latter allows the subject to continue living. It has also been conceptualized as an indicator of a coping strategy or a way of dealing with stress (Haines & Williams, 1997), or as the act of directing anger and punishment at oneself (Favazza & Rosenthal, 1993).

All of these problems with the concept and definition of self-injurious behavior have caused problems in defining in a more operative way the behaviors that can be considered as self-injurious and those that can be considered as suicide attempts. Thus, we can find studies that incorporate suicide attempts within self-injurious behavior, or conversely, others that consider certain self-injurious behaviors as suicide attempts and for this exclude them from the analysis. This difficulty is increased when we study these behaviors in different environments or settings. In this sense, Bostock and Williams (1974) already suggested that subjects who use self-injurious behaviors to manipulate their environment are more likely to repeat these behaviors, since they are aware of their impact and consequences.

Therefore, and in summary, the problems of definition and consensus regarding the concept of "self-injurious behaviors" focus on the following specific issues: a) the intentionality of the behavior, b) the severity of the injuries, c) the repetition of the behavior, d) the inclusion of self-mutilation. These four aspects constitute a significant portion of the differences among the majority of the studies. We propose the following definition (Roca, 2009): we understand as "self-harm" all physical injury or damage that is caused by a person to him or herself without the intention of dying. This coincides with the definition given by Isaccsson & Rich (2001). We consider that self-harm or self-mutilation performed when the person has the intention to die should be studied as suicide attempts or parasuicidal behaviors. In the case of people who do die, having made their intention clear (via a letter, message or otherwise), these must be categorized as suicides. People who die without having made their intentions clear would have to be studied as a separate group from that of suicides because we cannot obtain information about the intentionality of their behavior. Consequently, the concept of self-mutilation would refer to the voluntary or express loss of a part of the body and, although it is a type of self-harm, we would have to study it differentially until its similarity and congruence with self-harm can be demonstrated.

WITH REGARD TO THE CLASSIFICATION OF SELF-INJURIOUS BEHAVIOR

Another difficulty in research in this field is the broad range of behaviors that can be classified as self-injurious. This broad range, firstly, obliges us to make very broad definitions and, secondly, is an indication that the

phenomenon is probably much broader, and more heterogeneous, than has been assumed until now. Very rarely are self-injurious behaviors differentiated according to the extent of the injury, the location of the injury or its severity (Rosen & Heard, 1995). One of the few attempts to systematize the phenomenon comes from Favazza et al, who established three subtypes in 1993. The first group consisted of patients diagnosed with schizophrenia and involved the existence of very serious self-harm. The second group was related to the use of stimulants and mental retardation and sustained self-injuries that were carried out in a rhythmic or stereotyped way. The third group involved the existence of superficial or moderate self-harm injuries.

A study carried out in Spain (Pérez de los Cobos, Trujols, Ribalta & Pinet, 2009) attempted to classify a group of 164 heroin addicts according to the self-injurious behaviors they had carried out throughout their life. The results led to the classification of three groups: the first was made up of the majority of the sample (98 subjects, 59.7%) and was named by the authors "Group with low frequency of self-harm" because they reported less self-injurious behavior than the rest of the sample. The second group ("Scab-picking group") and the third group ("Group with cuts and blood") reported a higher incidence of self-injurious behavior of any type than the first group. The second group differed from the third because they had picked their scabs off more times than the third group and they showed less self-harm with cuts and blood. In this study, a scale was developed in order to evaluate self-harm retrospectively. This instrument had 15 categories and the factor analysis was very close to that found by Favazza and Simeon (1995) although instead of three factors, Pérez de los Cobos, Pinet, Ribalta, Trujols, and Casas (1994) found four, which explained 69.3% of the variance. The factorial solution was as follows: Factor 1, cutaneous self-harm with objects, which explained 27.3% of the variance; Factor 2, cutaneous self-harm without objects, 18.2% of the variance; Factor 3, self-harm by blows, 12.3% of the variance; Factor 4, picking scabs to self-harm, 11.5% of the variance. Factor 4 was the only one that Favazza and Simeon (1995) did not describe, whereas the other factors were almost identical. Another aspect addressed in the study by Perez de los Cobos et al. (2009) is that of suicide attempts. In the sample studied, 164 heroin addicts, it was observed that the addicts belonging to the third group ("Group with cuts and blood") showed a greater number of injury attempts, reported by the addicts themselves, than in the two other groups. Moreover, these differences were not present in relation to the number of overdoses or with respect to the variables related to heroin use. These differences suggest the possibility of the existence of a group of addicted people who, independently of their drug use, are different from other addicts in relation to their self-injurious and suicidal behavior, presenting a greater tendency toward these behaviors.

SELF-INJURIOUS BEHAVIOR IN THE COMMUNITY AND IN PRISON

The self-injurious behaviors most often described in prisons are those of cutting, burning and abrasions (Liebling & Krarup, 1993) although there are no comprehensive studies in this regard. Jackson's study (2000) carried out at a maximum security hospital, indicates the existence of people with a high risk; in their sample of 127 patients, 5 of them carried out 67% of all self-harm incidents.

A study by Borrill, et al. (2003) carried out with a group of 301 women prisoners in English prisons raised the idea, though not conclusively, that drug dependence may be a predictor of self-harm in the prison population of color. With respect to the general population, and in the emergency department of a hospital in which all self-injurious acts were recorded for two consecutive years, it was observed that the most common method of self-harm was drug-taking, amounting to 72.6% of cases (Hidalgo, Santiago, García & González, 1994) whilst the number of serious self-injuries made up 6.4% of the total.

Within prisons, self-injurious behaviors are a type of behavior that causes a significant number of problems and generates high levels of stress, both among the professionals working there, and among the inmates themselves. These behaviors often involve a disruption of the normal functioning of the prison that can affect a substantial number of activities. There are few studies in our country on self-harm in prison. Specifically, we highlighted the work of Laliga, Mendaña, Traserra and Gómez (1991) and the studies by Mohino et al. (2004). In the work of Laliga et al. (1991), 73 self-injurious behaviors were recorded that occurred in 46 subjects in 1990 in a youth prison. Of these 46 subjects, 30 injured themselves once, 9 twice, 3 three times and 4 inmates injured themselves four times. The wounds were mostly on the arm (64.4%), while 11% occurred on the

abdomen, 8.2% were due to the ingestion of a foreign body and 8.2% were hangings. All other types of self-harm accounted for 8.2%. One of the most relevant data obtained was the finding that, of the 46 inmates who injured themselves, 84.7% were parenteral drug users.

In addition, 45.65% of participants had self-harmed prior to the study and 90.5% of these were parenteral drug users. This work enabled the authors to classify three types of self-injury which, when related to demographic, clinical and criminological variables, allowed them to propose the existence of two basic patterns of self-harm, one in the prison context and the other one not, which they considered relevant in establishing treatment strategies.

The most recent study conducted by Mohino et al. (2004) compared a sample of 26 inmates with self-injurious behaviors from the Youth Penitentiary Center of Catalonia with a control group of 81 inmates from the same center who did not present these behaviors. In the study, no significant differences were found among demographic, criminal or penitentiaries variables. The results indicated the significance of symptoms such as anxiety, depression, and alcohol consumption in self-injurious behavior. In fact, the data collected indicated a higher prevalence of dependence on alcohol than on other drugs in these people. Regarding personality disorders, the results indicated that inmates who self-harmed had higher scores on scales of borderline, oppositional and antisocial personality disorders and that these three scales were sufficient to correctly classify 92.6% of the sample.

Another motive of interest in studying self-injury is the association between this behavior and suicide. Although this association has not been demonstrated, some studies treat both behaviors as symptoms of the same disorder and/or as a continuum of this type of behavior. In fact, there are no relevant data indicating a higher prevalence of self-harm among inmates who commit suicide than in the general population (Liebling, 1992). In this regard, Hawton and Catalan (1987) indicate that inmates who self-harm have a suicide rate that is approximately 100 times higher than that of the general population. In this sense, it should be noted that in interviews with inmates in prisons, it is easy to see how inmates are able to differentiate clearly and without any problem between self-injury with and without suicidal intent when speaking retrospectively. It is a topic that inmates can talk about easily, since this type of behavior does not involve any form of disciplinary proceedings or punishment by the Penitentiary Regulations.

PSYCHOPATHOLOGICAL ANALYSIS OF SELF-INJURIOUS BEHAVIORS

The behaviors of the subjects may vary over time for various reasons, and cultural and social factors have an important influence on these behavior changes. For example, in the 90s, people who wore tattoos were related to very marginal and/or criminal subcultures, to the extent that there are studies in which significant correlations were found between the surface of skin tattooed and antisocial personality disorder (Aluja, 1991). From the point of view of psychopathology, we find that within the DSM-IV self-injurious behavior usually occurs as a symptom or criterion of diagnosis in borderline personality disorder (on Axis II), and indirectly in the factitious disorder on Axis I (APA , 2000). This gap indicates that, conceptually, it is unclear whether self-harm and/or self-mutilation belongs to a particular diagnostic group. It can also be argued that this behavior has been used as an indicator or a thermometer for a disorder that has already been detected and to which the responsibility for the self-injurious behavior is attributed. It is astounding that a behavior that can generate health problems, especially emergency cases, should be conceptualized as a nonspecific and secondary indicator and should not have been given more prominence regarding attempts to understand and relate it to the rest of psychopathology. Clinical experience suggests that the diagnostic possibilities are broader than those suggested by the handbooks. In clinical practice we can find patients with different diagnoses who, at the same time, present self-injurious behaviors of varying importance and consideration.

SELF-HARM AND PERSONALITY DISORDER

Criterion number 5 for diagnosing borderline personality disorder refers to the presence of self-mutilation as well as suicidal behaviors, attempts or threats (Tantam & Whittaker, 1992). Strictly speaking we should leave out self-harm, because there are significant differences between self-harm, self-mutilation and suicide attempts. Some studies on borderline personality disorder have found interesting results. For example, Herpertz, Sass, & Favazza (1997) found in a sample of patients with self-harm that around 48% met criteria for borderline

personality disorder and that, when the criterion of self-harm were excluded, the rate fell to 28%. Rusch, Guastello and Mason (1992) found, in a sample of 89 patients who met the diagnostic criteria for borderline personality disorder, that those criteria displayed a factorial structure with three factors: (i) Instability, comprising criteria of inappropriate anger, unstable relationships and impulsive behavior, (II) Self Destruction / Unpredictability comprising self-harm and emotional instability, and (III) Identity disorder.

Factor II was presented by 82 of the patients, while factor I was present in 25 patients and factor III in only 21 patients. Rusch et al. (1992) believe that the data suggest that either self-harm is the most relevant symptom in borderline personality disorder or there is a tendency to assign this diagnostic category to any patient who exhibits a symptom of self-injurious behavior. A study by Hill, Rogers & Bickford (1996) attempted to test whether psychopathic personality disorder (assessed by the PCL-SV scale) had any predictive ability in relation to suicide, self-harm, aggression or risk of escape in a prison psychiatric ward. The data obtained indicate that the score on the scale of the PCL-SV alone can predict aggressive behavior and non-compliance with treatment guidelines. When a sample of 1,986 army troops was studied (Klonsky, Oltmanns, & Turkheimer, 2003) the result obtained was that only 4% of the sample reported a history of self-harm. This sample of 4% stands out from the rest of the population because they obtained higher scores in relation to the symptoms of borderline, schizotypal, dependent and avoidant personality disorder.

On the other hand, a study by Engström Alsén, Gustavsson, Schalling and Träskman-Bendz (1996), which attempted to determine whether there are differences of temperament and/or personality in patients who have attempted suicide, observed a very significant heterogeneity amongst the subjects, and concluded that there is no "suicidal personality".

SELF-HARM AND MOOD DISORDER

Self-harm is often used as a mechanism to regulate the tension experienced in stressful situations, so in people with mood disorders it can become an easy strategy for regulating their moods or coping with situations or feelings of psychological distress. For this reason, the diagnosis of these disorders in patients who show self-injurious behavior needs to be completed with great care, comparing information that the patient gives us with that which the family may be able to provide. The data from the study by Klonsky et al. (2003) indicate that the sample of soldiers with a history of self-harm, which they compared with other soldiers who had no such history, had higher scores in relation to symptoms of anxiety and depression. In another study (Haw, Houston, Townsend, & Hawton, 2002), it was noted that depression was the most common diagnosis among patients who experienced self-harm and suicide attempts. Despite these data, there are other studies that do not find such a relationship. Specifically, the studies by Herpertz, Steinmeyer, Marx, Oidtmann & Sass (1995) and Simeon et al. (1992) did not find differences in the scores of the Beck Depression Inventory (Beck, Ward, Mendelson, Mock & Erbaugh, 1961) between subjects who self-harmed and those who did not in the former study (control sample adjusted for several variables) or between subjects that self-harmed impulsively and those that did so intentionally, in the case of the latter study.

SELF-HARM AND EATING DISORDERS

There are some studies that indicate a certain relationship between self-injurious behavior and eating disorders. Favazza (1996) notes that both anorexia and bulimia may be used by children and adolescents in order to anger or manipulate their parents (just as with self-harm). It is clear, however, that self-harm is one of the mechanisms commonly used to address the internal stress experienced by a patient or to resolve a conflict with another person and, therefore, it may be the case that self-harm serves to resolve feelings of guilt related to episodes of bulimia. The study by Welch and Fairburn (1996) points in this direction; the authors studied self-harm in a sample of bulimic patients. This group of patients obtained similar scores to the control group in relation to alcohol consumption, but had a more significant use of other drugs and a higher rate of self-harm than the control group. There are several studies that show how eating disorders (specifically, bulimia) improve with naltrexone treatment (Jonas & Gold, 1986, 1988), which is also used in dealing with self-injurious behaviors (Barrett, Feinstein & Hole, 1989; Bernstein, Hughes, Mitchell & Thompson, 1987). The study by Pérez de los Cobos et al. (1994) with a group of addicts being treated with naltrexone, found that there were three different sub-groups, one of which would be composed of people with serious deficits in impulse control (including

bulimia disorders), a second group consisted of subjects who, when beginning an abstinence from opiates, also began to present bulimic behaviors and a third group is characterized by presenting bulimic behaviors when consuming substances but these disappeared when subjects were abstinent.

SELF-HARM AND IMPULSE CONTROL DISORDER

The DSM-IV (APA, 2000) uses certain criteria (especially referring to Impulse Control Disorder Not Otherwise Specified) which fit many of the descriptions that patients give of self-harm episodes. For this reason, it is one of the most widely used diagnostic instruments with people with self-injurious behaviors. The highly significant relationship between impulsivity and drug use must also be emphasized, as found by Dawes, Tarter, and Kirisci (1997). In their study, these authors found that children of parents with drug problems had higher scores on various tests related to both impulsivity and attention deficit disorder. On the other hand, the criteria used in relation to drug use by the DSM-IV reflect certain impulsive behavior, for example, the consumption of increasing amounts of drugs and for a longer time than the patient meant to, the constant desire to reduce consumption or the consumption of the drug despite knowing the consequences of doing so. There are different studies in relation to the comorbidity between disorders due to and for impulse control and addictive behaviors (Brady, Myrick & McElroy, 1998). In these studies, it is stated that delinquents with impulsive behaviors have a prevalence of drug abuse of between 20 and 100%. This high relationship has led some authors to understand the study of impulsivity based on the number of different behaviors in which the subject has a control deficit rather than a lack of control in a certain behavior (Stanford & Barratt, 1992).

The close relationship between aggressive behavior, impulsivity and drug use may have its raison d'être in a possible alteration of the opioid system, a fact that could explain why some addicts improve their behavioral control (at the level of aggression and bulimic behaviors) with the administration of opioid antagonists such as naltrexone (Pérez de los Cobos et al, 1994; Rosen & Heard, 1995). The research by Herpertz, et al. (1995), which studied subjects who self-harm impulsively and subjects who self-harm in a planned way, found that the former have higher scores on the Barratt Impulsivity Scales but not on the scales of aggression (STAXI) or depression (Beck depression Inventory). The need for specific instruments for determining impulsivity in the prison population should be noted as those that currently exist do not have sufficient discriminative ability.

SELF-HARM AND SUICIDE

Not much is known about the relationship between self-harm and suicide and, in a special situation such as the prison, it is possible that the motivations that generate one behavior or another are very different in relation to the behavior of the same subject when he or she is out of prison (Dooley, 1990). In fact, most of the studies have been carried out using single case methodology or only studying a very specific population (Wilkins and Coid, 1990). Also in most studies we can observe the difficulty of obtaining reliable and valid measures of the concepts of self-harm and attempted suicide, because the operational definitions used do not clearly differentiate between the two behaviors (Kreitman, 1977; Ennis, 1983). Fulwiler, Forbes, Santangelo and Folstein (1997) conducted a study to try to distinguish between inmates who self-mutilated and those that attempted suicide. Although the sample was not very large (16 self-mutilators and 15 inmates who had attempted suicide), this study indicated that suicide was associated with a mood disorder (86.6%) while the same did not occur with the self-mutilators (only 12.5% presented a mood disorder). It was also noted that 75% of self-mutilators had a history of childhood hyperactivity while this characteristic was only present in 6.67% of inmates who had attempted suicide (Fulwiler et al., 1997).

A study by Franklin (1988) at Central Prison in Raleigh obtained results that suggest that around 50% of inmates in prison who self-harm recognize that their goal is manipulation, whereas for Power and Spencer (1987) the percentage oscillates around 28%. These two studies confirm what many of the authors point out: that most self-harm in prisons is intended to manipulate, which supports the idea that any behavior with a low risk to life must be interpreted as having manipulative purposes (Haycock, 1989a; Liebling, 1992). In spite of this, McDonald and Thomson (1993) found that there was a much greater risk in police custody situations than among people in the general population, calculating that the increased suicide risk is three times that observed in the normal population (Tuskan & Thasse, 1983). In their study, Dear, Thomson and Hills (2000) found that they could not differentiate between the manipulators (subjects who self-harmed) and

those who attempted to commit suicide. Out of the 81 inmates studied, all of whom had experienced self-harm in the previous three days, two out of three who had made some attempt at manipulating had incurred at least one moderate level suicide attempt and, out of every six who had self-harmed, one inmate had at least one episode that put their life at risk. One of the most operative performance criteria in order to differentiate the two behaviors is that of intentionality. Some individuals may actually cause themselves serious self-harm that puts their life at risk, even though this was not their intention (Velamoor & ernovský, 1992). On the other hand, we can find suicide attempts with little consistency and which constitute a low risk of death or danger. Estimated suicide rates in this environment, however, are high, especially among young inmates (Thronton, 1990; Zamble and Porporino, 1988).

Pain has also proved its importance. Thus Theodoulou and Harris (2005) show that in a sample of people who self-harmed, in 4% of cases the experience of pain was associated with self-harm but they also had higher scores on the index of desire to commit suicide and low rates of psychiatric disorder or drug use. Some studies have also reviewed the relationship between risk to life and attempted suicide. Thus, while some authors found a relationship between the two behaviors (self-mutilation and suicide) with the method used (Hamdi, Amin & Mattar, 1991; Pierce, 1977), others did not (Power & Spencer, 1987). Liebling (1992) found no relationship between the risk to life and suicide attempts in their sample of young inmates.

A study by Fanous, Prescott, and Kendler (2004) attempted to predict suicidal ideation in a population of 2,164 female twins, using multivariate techniques and Event History Analysis. Despite the sample size and statistical techniques used, the authors fail to predict either of these behaviors satisfactorily. A recent investigation (Barr et al., 2007) studied the differences over 5 years of follow-up between patients, treated in an emergency ward, who left a suicide note and those that did not. The data indicated that the patients who had left a note had a higher risk of attempting suicide again than those who had not left a note. Brent (1997) highlights the importance of evaluating and defining strategies for managing young people with self-harm in order to prevent and reduce the potential risks of suicide as well as to detect and treat concomitant psychopathology and establish a treatment to help patients to develop problem-solving and social skills.

The influence of ethnicity has also been studied. The aforementioned study on women by Borrill et al. (2003), already pointed to the possible relationship between self-injurious behavior and suicide attempts, especially when taking into account the ethnicity of the population. In male prisoners a certain relationship has also been found in the sense that inmates of African origin may present a lower suicide rate than those of Hispanic, European or Anglo-Saxon origin (Haycock, 1989b).

One piece of data that is revealing in terms of the prediction of suicide is that of previous suicide attempts. A study by Fruehwald, Frottier, Matschnig and Eher (2003), which analyzed the medical records of 250 inmates of Australian prisons who had committed suicide between 1975 and 1999, found that 50% of these subjects had made a previous attempt and that 37% had expressed suicidal thoughts before proceeding. In this sense, the authors also stress that in a previous study from 2001 (Fruhwald, Frottier, Eher, Benda, & Ritter, 2001) they had already highlighted the need within the prison environment, for any inmate who gave any indicator of a suicide attempt, threatened verbally to do so or self-harmed should be referred for psychiatric consultation. Other relevant data are given by the toxicological history. The study by Murphy, Rousanville, Eyre and Kleber (1983) found that, in a sample of 533 addicts, the variables that differentiate between subjects with a history of suicide and those with no such history were the number of alcohol-related problems, significant use of amphetamines, tranquilizers, and inhalants, as well as a lesser marijuana use among those subjects with suicide attempts. Addicts with an increased risk of suicide had a profile characterized by fewer resources and personal skills. Carter, Reith, Whyte and McPherson (2005) found that, in a sample of 31 patients who had committed suicide compared with a control group of 93 patients who had only attempted suicide, the variables that indicated an increased risk of suicide were those related to the area of toxicology (number of substances, increasing doses and frequency of use). Finally, additional relevant variables include a recent diagnosis of HIV seropositivity, psychiatric history and a history of self-harm (Gala et al., 1992.).

SELF-HARM AND DRUG ADDICTION

We could extend this exposure to a long list of psychopathological disorders that have been linked with self-injurious behavior, to a greater or lesser intensity. Thus, for example, trichotillomania pertaining to

obsessive disorder has been linked with self-injury and more specifically when it is part of a compulsive ritual (Yaryura-Tobias, Neziroglu and Kaplan, 1995). Something similar happens with what Herman (1992) calls "complex post-traumatic stress disorder" which considers the self-injurious behavior as an emotional regulator in the stress response. Studies such as those by Leonard, Brann, and Tiller (2005) or Orbach (1994) report a tenuous relationship between self-injurious behavior and dissociative disorder although they qualify it as not very specific or the best known use of self-harm as a coping strategy in situations of anxiety disorder. Finally, this list of relationships should include the work of Haw, Hawton, Sutton, Sinclair, and Deeks (2005) who, using a meta-analysis of 14 studies, show a certain relationship between some factors of psychotic disorders and the presence of self-harm, interpreting the latter as an indicator of severity of the disorder.

However, many of these studies are very weak in character and, consequently, provide scarce empirical contribution regarding the degree of stability of these relationships. The opposite occurs in the case of drug addictions, where the occurrence of addictive behavior and self-harm leads us to believe there is a much closer relationship between these two entities, according to the proposal of various studies such as Lacey and Evans (1986); Linehan, Oldham and Silk (1995); Haines, Williams and Brain (1995); Kennerley (1996); Burgess et al. (2001); Coll, Law, Tobias, Hawton and Tomas (2001); Ros, Peris and Gracia (2004) or Martinez et al. (2005).

The importance of this structure and its study is revealed by a series of arguments and observations which we discuss below in detail. Firstly, self-injurious behaviors have not been studied properly in this population, despite the repeated highlighting of the link between the two behaviors (Borrill et al., 2003; Brooke, Taylor, Gunn & Maden, 2000; Schwartz & Cohen, 1989). Secondly, drug use can be understood as self-injurious behavior in itself (Favazza, et al., 1993; Murphy, et al., 1983; Pattison & Kahan, 1983), so at times the concept of addiction has been used in defining and understanding self-injurious behavior (Favazza, et al, 1993; Faye, 1995). In addition, drug-abusing patients who self-harm cause problems in emergency rooms due to the risk in relation to the human immunodeficiency virus (HIV) (Garcia Velasco & Martínez Cordero, 1994; Hidalgo Rodrigo, et al., 1994). All of these observations clearly highlight the close relationship between the two phenomena in the prison environment.

Thus, in the study by Laliga et al. (1991) a significant relationship was found between drug use and self-injurious behavior. Of all subjects who incurred self-injurious behavior, 84.7% were drug injectors, whereas in the population of the center only 57.3% were drug injectors. When taking into consideration self-harm prior to admission to prison, it was found that 21 of the 46 inmates had a history of self-harm and 90.5% of these 21 inmates were drug injectors. Another study by Stocks and Scott (1991), carried out over five years at an emergency facility in Edinburgh, found that 87% of admissions due to self-harm were related to an overdose and 75% of patients had been convicted at least once.

At a theoretical level and according to Faye (1995), there are three points of similarity between addictive behavior and self-injurious behavior: 1) both behaviors are equally rated with regard to the emotions experienced, the family structures, the origin of the behavior and the repetition of responses of tension and relaxation; 2) both behaviors have similar difficulties in their approach: the behavior is usually carried out in private and in solitude, and there is a lack of information and awareness regarding the illness and 3) clinicians can use very similar strategies in order to address the needs of these patients.

Despite these similarities, Faye (1995) does not clearly explain the significant differences observed among patients who self-harm. This observation makes it necessary to first establish the different types of self-injurious behavior, if they indeed exist. In this regard, the work of Murphy et al. (1983) notes that the association between overdose and suicide attempts suggests the idea that a non-lethal overdose may represent a type of suicidal behavior. There have been other attempts to find subgroups of drug users among patients with dual pathology. One hypothesis is that individuals with dependence on stimulants, cocaine or amphetamines should manifest more problems related to violence and self-harm, as well as a greater number of hospital admissions (Miles et al., 2003).

FINAL COMMENT

Some authors, such as Favazza and Rosenthal (1993) and Alderman (1997), propose to consider self-injurious behavior as a disorder and not a symptom of a disorder. Their proposal includes the consideration to situate this disorder in Axis I of the DSM system and the denomination "Repetitive Self-Harm Syndrome". They

argue this proposal on the grounds that, in some cases, the self-injurious behavior is maintained even though other symptoms or disorders have disappeared and that, in other cases, this behavior appears without the existence of any other type of disorder. Other authors, such as Tantam and Whittaker (1992), have pointed out that the act of self-harm may occur with the aim of coercing others and relieving the distress experienced. They consider therefore that individuals who repeatedly self-harm should be considered as people displaying addictive behavior, rather than it being interpreted as a symptom of a broader disorder.

In summary, in the study of self-injurious behaviors, there is a great variety of studies focused on the relationship between these behaviors and disorders. The heterogeneity of the types of self-injurious behaviors and the difficulty in clearly determining the relationship between suicide and self-injury, if indeed such a connection exists, require a deeper analysis of the types of self-injurious behavior, as well as the relationship between these behaviors and their underlying psychological mechanisms and processes.

Now, this diversity of approaches and concepts may be somewhat alleviated if we focus on the analysis of self-harm in prison, that is, in a very particular and specific context that can lend itself to more specific approaches which facilitate much more precise information. Recent studies show some interesting contributions which we wish to outline here, in order to conclude this paper (Fagan, Cox, Helfand, & Aufderheide, 2010; Gunter, Chibnall, Antoniak, Philibert, & Hollenbeck, 2011; Lanes, 2009a; 2009b). In essence, the presence of self-injurious behavior in the prison environment should be regarded less as a separate entity and more as an indicator of psychopathology and its presence should be treated as a complex entity associated with the severity of a disorder and with difficulties in prognosis. The studies cited show that the anomalous behaviors have decreased in very high percentages as a recurrent effect of psychological intervention and as a consequence of the treatment process, without the establishing of a specific diagnosis or exclusive treatment approaches. Similarly, the therapeutic results have been moderate with many different techniques but there is great consistency in that, regardless of the therapeutic approach, the self-injurious behavior reduces as a result of the most general treatment. Furthermore, these data indicate a second characteristic to consider in the prison environment, and focuses on the fact that, in over 65% of cases of self-injurious behavior, the symptom is associated with a severe disorder and, therefore, this conception of self-harm as an indicator of severity is important to bear in mind. In short, the presence of self-harm is a robust indicator of severe mental illness and it rarely occurs in the most common neurotic disorders. Finally, seeking some more applied aspects of all that has been presented above, there seems to be a broad consensus that, no matter how self-injurious behaviors are analyzed in prison, urgent intervention is required. Not only for the obvious safety reasons, but also because its role as a severity indicator means that self-harm increases very rapidly, in a way that does not afford large delays in the clinical approach. The studies we have cited indicate that in most cases where self-harm emerged in prison, the appearance of much more unstructured pathological responses occurred within a relatively short time and in a particularly violent way. Thus it seems necessary that beyond what is scientifically known about self-injurious behavior in prison and from whichever theoretical or phenomenological position it is addressed, clinical intervention is absolutely crucial at the level that is deemed necessary, whether it is treated specifically as a particular disorder or, more generally, as a symptom of more complex pathological structures.

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