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Study of prevalence of Personality Disorders in inmate men sample with Substance Use Disorders using of PDQ-4+ Self-Report

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Introduction. The study focused on examining the prevalence of Personality Disorders (PD) in 51 male inmates diagnosed with Substance Use Disorders (SUDs) lifetime within a specialized unit at a prison.

Methods. The instruments administered included the Structured Clinical Interview for DSM-IV Axis I and the Personality Diagnostic Questionnaire-4+.

Results. The type of crime most frequently committed by the incarcerated was the robbery (76.5%), including robbery with violence. 45.1% of the patients screened positive for Antisocial PD, followed by 35.3% for Paranoid and 23.5% for Obsessive Compulsive PD. The results reflect a male inmate sample exhibiting a clinical profile characterized by SUDs and PD, with almost half of the total sample presenting Antisocial PD.

Conclusions. The presence of Antisocial and Paranoid PD with SUD suggests a more complex personality profile, with a tendency to carry out more aggressive crimes, including robbery with violence. A more comprehensive PD assessment should be carried out in prison settings in order to identify dangerous individuals who are at risk of recidivism.

Keywords: Offenders, Personality Disorders, Substance Use Disorders, PDQ-4+

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Estudio de prevalencia de Trastornos de Personalidad en una muestra de presos con Trastorno por Uso de Sustancias usando el autoinforme PDQ-4+

Introducción. Este estudio tiene como objetivo estudiar la prevalencia de Trastornos de Personalidad (TP) en 51 hombres presos en una unidad penitenciaria especialidad en Trastorno por Uso de Sustancias (TUS).

Método. Los instrumentos administrados eran la Entrevista Clínica para Trastornos del Eje I del DSM-IV y el autoinforme *Personality Diagnostic Questionnaire-4+*.

Resultados. El tipo de delito más frecuentemente cometido entre los presos era el robo (76.5%), incluyendo robo con violencia. El 45.1% de los sujetos puntuaban como positivos para el TP Antisocial, seguido por el 35.3% de TP Paranoide y 23.5% TP Obsesivo-Compulsivo. Los resultados indican una muestra de hombres encarcelados con un perfil clínico caracterizado por TUS y TPs, presentando casi la mitad de la muestra un TP Antisocial.

Conclusiones. La presencia de TP Antisocial y Paranoide con TUS sugieren un perfil de personalidad más complejo, con tendencia a presentar delitos más graves, incluyendo el robo con violencia. Una valoración más amplia de los TP debería ser realizada en muestras penitenciarias para poder identificar aquellos sujetos más peligrosos con mayor riesgo de reincidencias.

Palabras clave: Presos, Trastornos de Personalidad, Trastorno por Uso de Sustancias, PDQ-4+

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INTRODUCTION

Prevalence of mental disorders in prison population has been reported to be about 7 times greater compared to the general population¹. According to the World Health Organization (2013), 95% of incarcerated young people have at least one mental health problem and 80% end up with more than one. In terms of Substance Use Disorder (SUDs), it can be estimated that between 30% and 50% of the people already consumed substances before entering prison and 27% admit they continue to consume after imprisonment².

An epidemiological study in prison population estimated a prevalence of comorbidity of psychiatric disorders and SUDs of between 3% and 11%, suggesting that this comorbidity has been associated with negative outcomes, including higher rates of depression, suicide, violence, and homelessness³. In the other hand, one of the most common disorders associated with criminal behaviour are Personality Disorders (PDs). Studies of risk factors for recidivism and violent crime prevention have identified subjects with PDs as a group with a tendency to perpetrate the most violent crimes⁴. PDs are often associated with poor psychosocial functioning, academic failure, unemployment and difficulties maintaining interpersonal relationships, leading to the emergence of behavioural disorders, substance abuse, among others, resulting in criminal behaviour^{5,6}. Research has suggested the prevalence estimated of PDs in prison samples at around 12-30%⁷, and the incarcerated with PDs present high comorbidity with other diagnoses, particularly SUDs and Attention Deficit and/or Hyperactivity Disorder (ADHD)⁸⁻¹⁰. Konstenius et al. (2012)¹¹ reported high prevalence of Antisocial Personality Disorder (APD) with comorbid SUDs in a sample of incarcerated with ADHD. Moreover, Howard et al. (2013)¹² showed that offenders with Antisocial and Borderline PD has been comorbidity along with other psychiatric disorders, particularly SUDs. Moreover, the risk for recidivism increased when PDs co-occur with drugs use or there is an alcohol dependency, suggesting that detecting specific personality psychopathology and the use of substances should be taken into consideration when assessing re-offending risk in forensic settings. Supporting such findings, recent studies suggest that comorbidity of PDs increases the risk for severe violent acts during adulthood¹³.

Few studies carried out within prison settings have been published in Spain. Of the existing literature in this country, one rigorous study showed that approximately 84.4% of them had suffered from a mental illness at some point in their lives, being SUDs the most frequent (76.2%), followed by Anxiety Disorders (45.3%) and Affective Disorders (41%)¹⁴. These findings were supported later by other authors, which reported the presence of 46.1% of Axis I disorders, followed by 35.2% of PDs¹⁵. Nonetheless, it is important to highlight that both studies focused mainly on

prevalence of Axis I disorders and did not explore in depth the relationship between PDs and SUDs for this population.

One study conducted among adolescents attended in the Juvenile Justice Therapeutic Unit (JJTU)¹⁶ also showed that 65.3% of the sample had a disorder on Axis I, being the most frequent SUD (78.5%), psychotic spectrum disorder (22.2%) and Attention Deficit Hyperactivity Disorder (18.1%). 42.4% had a personality disorder, the most frequent ones antisocial disorder (16%) and Borderline Personality Disorder (BPD) (6.9%).

Finally, others authors¹⁷ concluded that the personality psychopathology is the strongest predictor for violence acts, concretely, presence of personality traits of Cluster A or B, such as paranoid, narcissistic and antisocial, has proven to correlate significantly with violent crimes.

In our country, there is a significant gap in the assessment of prisoners characterized with PD symptoms. In this line, and taking into account the above described, the current study focused on evaluating the prevalence of PD with the Spanish version of self-report Personality Diagnostic Questionnaire-4+ (PDQ-4+)¹⁸⁻²⁰ in a sample of male inmates previously diagnosed with lifetime SUDs, which were taking part in a treatment protocol in a specialized treatment unit of a prison, and the potential impact on criminal behaviour committed.

METHODOLOGY

Participants

The male inmates were evaluated at an inpatient level within the specialized care unit at a prison in Barcelona, Spain, between 2011 and 2012. It is the treatment special programme of drugs within this psychiatric unit performs evaluations, diagnoses and multimodal treatment with the offenders in this setting. In order to gain access to the treatment programme, offenders must have a history of substance abuse and be abstinent from at least 3 months at the time of evaluation. All subjects admitted to the unit during that period were invited to participate in the evaluation protocol. Finally, 51 subjects performed a full evaluation, being all of Spanish origin. 2 subjects refused to participate in this evaluation. Exclusion criteria were being more than 65 years old, having an intellectual quotient lower than 70, and being under the influence of any substance at the time of admission to the programme, and have crimes that required specialized treatment, namely crimes related to sexual assault and/or gender violence. The study was authorized by the Health's unit in charge of prisons within Catalonia. All of the participants were informed of the study, warranted the confidentiality, and voluntarily decided to take part in it.

Instruments

The Structured Clinical Interview for Axis I Disorders for DSM-IV (SCID-I)²¹ was used to determine the presence of lifetime of Substance Use Disorder and other psychiatric disorders in our sample.

The Personality Diagnostic Questionnaire-4+ (PDQ-4+)¹⁸ is a self-report measure used to screen for prevalence of the PDs according the DSM-IV thresholds. The PDQ-4+ has shown suitable psychometric properties both in its original version and in its adaptation to other languages, cultures and different samples (general and clinical population and offenders)²²⁻²⁶. Actually, the screening tool for PDs currently used in some countries with inmate population, and some authors suggested that the self-report could be used as a potential screening instrument for PDs in prison samples²². The Spanish version of PDQ-4+ have been published previously by the same authors (N.C.), revealing good psychometric properties, and the questionnaire was shown to be a reliable tool for screening and assessment of PDs^{19,20}. However, it had not been used within a Spanish sample of incarcerated until now.

Procedure

The psychopathological clinical assessment was carried out by a senior psychiatrist in two consecutive weekly visits. This consisted of a clinical interview to obtain background information about subjects, the SCID-I interview and the PDQ-4+ self-report. The SCID-I provided information about the presence of a lifetime SUD and others psychiatric disorders in Axis I. The PDQ-4+ was used to assess the presence of a PDs in Axis II.

Statistical Analysis

Basic descriptive statistics were carried out to examine the demographic characteristics of the sample, crime and general prevalence. Frequency tests were used to evaluate the presence of psychopathological characteristics, including diagnosis of Axis I and II disorders. The statistical package SPSS version 20 was used to carry out these analyses.

RESULTS

A total of 51 male offenders were finally included in the study. All participants were male. The mean age was 36.35 years (SD=7.96; range 22-54 years). With respect to marital status, most participants were single (n=41; 80.4%). Comorbidity with Axis I disorders was detected, the most prevalent being Anxiety (13.7%) and Affective Disorders (11.8%). Among the inmates with Substance Use Disorders

in lifetime, the most common substances were cocaine (86.3%) and cannabis (62.7%). Regarding type of crime, 22 (43.1%) of the participants were incarcerated primarily due to violent and aggressive robbery, followed by theft only (n=17; 33.3%), whilst a final group (12 inmates, 23.6%) was represented by crimes related to drug trafficking, murder and illegal detention, among others. Of total sample, 58.8% of prisoners had reoffending into criminal behaviour.

Table 1 presents the prevalence of Personality Disorders according of PDQ-4+ self-report. A significantly high percentage of patients screened positive for PDs. Cluster B was more prevalent (n=27; 52.9%), followed by Clusters A (n=18; 35.3%) and C (n=17; 33.3%). The specific PDs most prevalent in the sample were Antisocial PD (APD) (23; 45.1%) in Cluster B, followed by Paranoid PD (18; 35.3%) in Cluster A, and Obsessive Compulsive PD (12; 23.5%) presented the highest frequency in Cluster C.

DISCUSSION AND CONCLUSIONS

This is the first study designed to evaluate the personality profile of a male incarcerated sample with lifetime SUDs in a specialized care unit at prison in Spain using the PDQ-4+ self-report for screening. Our results indicate a high comorbidity between SUDs and PDs, concretely with Antisocial PD (45.1%), and Paranoid PD (35.3%). Moreover, the data obtained reflect a profile in which more than half of the offenders were recidivistic in terms of criminal behaviour, particularly robbery, including those involving violence, accounting for the majority of the crimes reported by this sample.

Our results are consistent with findings reported by previous studies carried out with similar population samples^{9,13,22,27}. Generally, studies informed that most prisoners diagnosed with PDs present high comorbidity with multiple Axis I disorders, particularly addiction disorders⁹. Our results agree with previous studies¹⁴ reported high comorbidity between psychiatric disorders, with Antisocial PD being one of the most prevalent along with SUDs in a Spanish prison sample. The prevalence obtained in our study agrees with that published in other studies carried out in prison settings, suggesting that Antisocial PD tends to overlap considerably with criminal behaviour^{13,22,27,28,31,32}.

Moreover, those participants that presented Antisocial PD and Paranoid PD with SUD was identified; similar patterns amongst PDs have been suggested by previous research in other countries^{9,12,28,29}. This data seem important, and could suggest a more complex personality profile, characterized by a tendency to carry out more aggressive crimes, for example, robbery with violence. However, no studies in our environment are available that allow us to compare our results.

| Table 1 | | Prevalence of Personality Disorder according self-report PDQ-4+ (n=51) | |
|----------------------|----|--|--|
| PDQ-4+ Criteria | n | % | |
| Cluster A | 18 | 35.3 | |
| Paranoid | 18 | 35.3 | |
| Schizoid | 4 | 7.8 | |
| Schizotypal | 4 | 7.8 | |
| Cluster B | 27 | 52.9 | |
| Antisocial | 23 | 45.1 | |
| Borderline | 10 | 19.6 | |
| Histrionic | 1 | 2.0 | |
| Narcissistic | 3 | 5.9 | |
| Cluster C | 17 | 33.3 | |
| Obsessive Compulsive | 12 | 23.5 | |
| Avoidant | 7 | 13.7 | |
| Dependent | 3 | 5.9 | |

Nonetheless, the current study presents some limitations that should be overcome in future research. Firstly, the small sample size obtained at the recruitment stage limits the generalizability of our findings to similar population groups. However, it is important to take into account the lack of other specialized units within prison settings in Catalonia, resulting in difficulties when attempting to recruit larger samples. Second, the study only included male offenders, so our results are not extendable to the female offender population. Third, the sample consisted only prisoners of Spanish origin. Considering the presence of foreigners in the prison environment, future studies should target this population in order to obtain more conclusive data. Fourth, personality assessment was performed with an instrument of self-report that only allows a screening. Future studies should use personality diagnostic measures, such as semi-structured interviews. Finally, it is crucial to highlight that no diagnosis for Attention Deficit and Hyperactivity Disorder (ADHD) was established. Future studies should consider the importance of assessing ADHD symptoms given their predictive relationship as a risk factor for offender behaviour and PDs^{10,11,30}.

In summary, the results of this study suggest that, when assessing prison samples with diagnosis for lifetime Substance Use Disorder, most of them presenting comorbidity with Personality Disorders, especially Antisocial and Paranoid

PD. Co-occurring PDs could be related to the presence of a differential profile for increased risk of violence, suggesting that may have more tendency to commit certain criminal behaviour. Further research is needed in order to determine the extent to which this association PD and SUD is mediated and determinate in different forms of impulsive and aggressive behaviour result in different types of crimes being committed.

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CONFLICT OF INTEREST

None.

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