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Diagnostic procedures and classification of antisocial behavior in Norwegian inmates in preventive detention

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ABSTRACT

In official Norwegian government reports' prison statistics, it is claimed that the prevalence of Dissocial Personality Disorder (DPD) or Antisocial Personality Disorder (APD) among inmates in preventive detention is approximately 50%. Furthermore, previous findings have described a practice in which forensic examiners use the DSM SCID axis II for APD to confirm an ICD 10 diagnosis of DPD. Clinical investigation supported by the use of SCID Axis II for quality assurance was performed on almost half the population of inmates (46.4%) in preventive detention at a high security prison. The inmates had all committed severe violent acts including murder. All the information obtained by applying the DSM IV-TR criteria was tested against the ICD-10 Research Criteria (ICD-10-RC) for Dissocial Personality Disorder (ICD-10, DPD). It was found that all inmates met the ICD-10-RC for (DPD) and the DSM-IV-TR definition for Adult Antisocial Behavior (AAB). On the other hand, none met the DSM-IV-TR criteria for (APD). The SCID Axis II failed to identify inmates with APD because the DSM-IV-TR C-criteria, referring to symptoms of childhood Conduct Disorder (CD), were not met. These findings raise important questions since the choice of diagnostic system may influence whether a person's clinically described antisocial behaviour should be classified as a personality disorder or not. For the inmates, a diagnosis of APD or DPD may compromise their legal rights and affect decisions on prolongation of the preventive detention. Studies have shown that combining the DSM and the ICD diagnostic systems may have consequences for the reliability of the diagnosis.

Keywords: Antisocial Personality Disorder; Adult Antisocial Behavior; Forensic Psychiatry; Prisoners; Preventive Detention

1. INTRODUCTION

One of the problems in retrospective research in Norwegian forensic psychiatry is that few forensic examiners use psychometric tools for confirmation and quality assurance of their diagnosis—only 17% in a recent investigation [1]. A further problem is that the Diagnostic and Statistical Manual of Mental Disorders—4th Edition (DSM-IV), Structural Interview for Diagnosis Axis II (SCID II) [2] is used for the confirmation of International Statistical Classification of Diseases and Related Health Problems 10th Revision (ICD-10) [3] diagnoses of personality disorders [1].

Several authors have discussed incompatibility issues between the 2 diagnostic systems. One study [4] found that when comparing the DSM-III-R to the ICD-10, 60% of the variance in personality disorder diagnosis was not attributable to the patients themselves. It also showed that the results of different studies with different instruments are not comparable [4]. A further study [5] found that the 2 systems came to the same primary diagnosis in only 29% of subjects. The ICD-10 has a lower diagnostic threshold than the DSM-IV. Starcevic *et al.* [6] concluded that the sources of disagreement between the latest versions of the 2 systems could be traced to differences in the conceptualization of some of the personality disorders, differences between criteria, and the diagnostic threshold. Other authors have criticized the use of DSM- and ICD-based clinical interviews for the assessment of personality disorders [7-9].

In a study on DSM-IV and ICD-10 diagnosis, the least concordant pair of personality disorders were antisocial behavior (DSM-IV) and dissocial behavior (ICD-10) [7]. The diagnosis "antisocial personality disorder" (APD) (code 301.7) is the classification of a behavioral disorder described in the DSM-IV-Text Revision (TR) [10]. For a diagnosis of APD, the person concerned must be at least 18 years old and must have had a history of symptoms of conduct disorder (CD) before the age of 15 years. A history of CD involves a repetitive and persistent pattern of

behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated [10]. The DSM-IV-TR also states that APD must be distinguished from criminal behavior undertaken for gain that does not comply with the personality features characteristic of APD. The term adult antisocial behavior' (AAB) (code V71.1) is recommended for the description of criminal, aggressive or other antisocial behavior that comes to clinical attention but that does not fully meet the criteria for APD [10].

In Norway, the ICD-10 [3] has been adopted as the diagnostic system of choice in all official health-related reports. The ICD-10 diagnosis of "dissocial personality disorder" (ICD-10, DPD) (code F 60.2) excludes the ICD-10 category "conduct disorders" (code F 91) as required for the DSM-IV diagnosis of APD by stating that: "*Persistent irritability and the presence of conduct disorder during childhood and adolescence, complete the clinical picture but are not required for the diagnosis*". The ICD-10 has no specific category like the DSM diagnosis of AAB.

This current report is based on findings from a large investigation on inmates in preventive detention [11,12] in which face-to-face interviews, including the DSM-IV, SCID II, were performed. Preventive detention in Norway is a special provision used by the courts if, at the time of sentencing, it appears likely that the perpetrator may commit new criminal acts of great harm to society. Preventive detention is not associated with imposition of a sentence with a specific term. Continuation of detention is evaluated after the perpetrator has served a minimum period set by the court at the time of sentencing. Later court decisions may prolong or abolish previous verdicts.

Criminals with APD and borderline personality disorders (BPD) tend to be more aggressive and impulsive than criminals without personality disorders [10,13]. Particularly APD and BPD are strong predictors of violence [10,14]. An official Norwegian government report [15] states that around 50% of inmates in preventive detention have the ICD-10 diagnosis DPD. Closer inspection of the tables in the report revealed that the prevalence rate is 45%. The report does not describe how the diagnosis was made or which criteria were used. It appears to be based on information from the inmates' files, which in turn rely on the diagnosis made by forensic examiners before imprisonment [15].

In view of the information about rare use of confirmatory measures [1], lack of information about diagnostic procedures [15] and the known discordance between DSM-IV and ICD-10 for APD and DPD [7], there is good reason to question the reliability of the reported prevalence of APD [15].

For the present study, the DSM-IV, SCID II was chosen because a prevalence rate of personality disorders with reference to the DSM-IV system alone is unknown for the inmates in question.

2. METHODS

This study was performed at the main prison for male convicts in preventive detention in Norway, Ila national high security facility in a suburb of Oslo. After having obtained the subjects' signed consent forms and approvals from the prison authorities and regional ethics committee, the data were collected between October 2008 and February 2009.

26 inmates of 56 (46.4%) participated in the study and were examined for personality disorders, including testing with the DSM-IV, SCID II. The DSM-IV, SCID II was chosen because of its suitability for research purposes and because this is the tool used by Norwegian forensic examiners.

The clinical interviews and the DSM-IV, SCID II scoring were done by 2 psychiatrists. For the APD criteria, point C reads: "*There is evidence of Conduct Disorder with onset by at least two of the following…*". A score of 3 for at least 2 of the items listed under point C in the criteria was set as the cut-off point for having symptoms before the age of 15 years. 3 of the 26 interviews were scored by both psychiatrists, the first 2 and the last one. The 2 psychiatrists were blinded to each others' scores.

Studies have shown that there has been difficulties in diagnosing personality disorder categories due to low levels of confidence between the ICD-10 Clinical Description and Diagnostic Guidelines (CDDG) and the Diagnostic Criteria for Research (DCR) [8,16]. Bearing this in mind, relevant information obtained during the interviews in this study, including the information that formed the basis for the scores on the DSM-IV, SCID II, was tested against the items listed under point B in the ICD-10 research criteria for DPD. These criteria are shown in **Table 1** below.

Table 1. ICD 10 research criteria for dissocial personality disorder.

A. The general criteria of personality disorder (F60) must be met.
B. At least *three* of the following must be present:
B1. Callous unconcern for the feelings of others.
B2. Gross and persistent attitude of irresponsibility and disregard for social norms, rules, and obligations.
B3. Incapacity to maintain enduring relationships, though having no difficulty to establish them.
B4. Very low tolerance to frustration and a low threshold for discharge of aggression, including violence.
B5. Incapacity to experience guilt, or to profit from adverse experience, particularly punishment.
B6. Marked proneness to blame others, or to offer plausible rationalizations for the behavior bringing the subject into conflict with society.

2.1. Comments

Persistent irritability and the presence of conduct disorder during childhood and adolescence complete the clinical picture but are not required for the diagnosis.

2.2. Statistics

Due to a low number of participants, no statistical analysis was applied. Thus description was chosen when calculating percentages.

3. RESULTS

All inmates, had a history of violent crime, aggressive behavior, irresponsibility and a tendency to rationalize as adults, and thus met the ICD-10-RC for ICD-10, DPD. The most frequent combination of criteria was points B2, B4 and B6 in **Table 1**. None of the inmates met the DSM-IV-TR criteria for APD. This because the DSM-IV-TR C-criteria referring to some symptoms of childhood CD were not met. Likewise, with a history of criminal behavior and aggression as adults, all inmates met the DSM-IV-TR definition for AAB.

Good inter-rater reliability (100%) was found regarding scores for personality disorders according to DSM-IV, SCID II. The examiners were unable to identify any obvious investigator-associated methodological error during the interviews.

The median age of the inmates was 47 years (range 24 - 60).

4. DISCUSSION

The prevalence of ICD-10, DPD was 100% in this study. This is not surprising because the ICD-10 has a lower diagnostic threshold than the DSM-IV. In contrast to this, using the DSM system, the prevalence of a confirmed DSM-IV, SCID II diagnosis of APD was 0%, but only because the DSM-IV-TR, C-criteria were not met. Since all the 26 inmates had documented antisocial and criminal behavior as adults, they qualified for the DSM-IV definition of AAB. This category is rarely, if at all, used in Norwegian forensic reports, most likely because the officially adopted ICD-10 criteria are to be used.

The number of times the inmates scored positively on the DSM-IV, SCID II, APD, C-criteria was lower than the required minimum of 2. Applying the research criteria for ICD-10, DPD, all the inmates met the criteria for diagnosis. Table I shows the items of which 3 have to be present for the B criteria to be met. The combination of B2, B4 and B6 was most frequently found in our study.

The reason behind the Norwegian practice of forensic examiners to use the DSM-IV, SCID II scale in clinical interviews to confirm the ICD-10, DPD diagnosis [1], is most likely because the detailed DSM scale is easy to use for diagnostic quality assurance. It is unknown why only few forensic examiners choose to confirm their clinically suspected diagnosis [1], but should perhaps be considered in view of a report published in 1995 [8,16]. This report presented the experience from clinicians and researchers in a field trial and found that more than 50% of the participants reported difficulties with diagnosing personality disorder categories using ICD-10-RC [16].

The DSM-IV and the ICD-10 diagnostic classification systems have quite different approaches. The ICD-10 targets lack of empathy and relationship instability whilst the DSM-IV is more concerned with impulsive and antisocial conduct [7]. Studies have also reported that the level of confidence between the ICD-10 CDDG and the ICD-10 Diagnostic Criteria for Research (ICD-10-DCR) are low [8,16].

From a clinical and therapeutic point of view, the discordance between DSM-IV-TR and ICD-10 have few, if any practical, consequences. A prison's psychiatric health care services will know how to identify and deal with an inmate with antisocial behavior regardless of whether or not any diagnostic criteria have been met. The clinical signs and symptoms of dissocial and antisocial behavior are the same. If different diagnostic tools are used, where, for example, the number of symptoms is decisive for classification, documentary differences may occur.

During the interviews in this study, none of the inmates showed signs of a pervasive pattern of disregard for—or violation of—the rights of others. Nor did they show signs of deceit, manipulation, aggressive outbursts or other signs of antisocial behavior, all APD characteristics listed in DSM-IV-TR [9]. It may be argued that being imprisoned has a preventive effect in itself on antisocial behavior, and in some cases it does. Previous studies on the same inmates [11,12] showed that they had received some psychological treatment, but rarely in one-to-one settings aiming exclusively at modifying antisocial behavior.

These studies [11,12] also reported that a large percentage of the inmates in preventive detention had problems with substance abuse before arrest. This information should be considered in a context where the issue is the need for quality assurance of diagnosis in forensic psychiatry. Substance abuse could explain a history of antisocial, aggressive and violent behavior. Lack of diagnostic quality assurance in cases with abnormal behavior where substance abuse dominates may lead to an incorrect diagnosis of APD. The DSM-IV-TR specifically underlines that when antisocial behavior in an adult is associated with a substance-related disorder, the diagnosis of APD is not made unless the signs of APD were also present in childhood and have continued into adulthood [10].

When diagnostic practices are unclear and where

DSM-IV, SCID II and ICD-10 are used in combination, unwanted consequences may occur, especially in the absence of quality assurance. In the light of our findings, it is difficult to imagine that the true prevalence of DPD among the inmates in preventive detention in Norway can be as high as 45% [15]. However, since the government report concerned gave no details of how the diagnosis was reached in each case, it is impossible to question this figure.

Those working in forensic psychiatry may be faced with lawyers who rightly question the purpose of having 2 different systems of diagnosis, especially when the systems lack concordance. Regardless of which diagnostic system is used, the diagnosis reached often becomes a negative label and will appear in various unpublished and published documents. A diagnosis written on paper is easy to correct, but in some cases it can be very difficult to reverse a diagnosis in peoples' minds once it has been made. Both questionable diagnostic accuracy and a lack of quality assurance compromise an inmate's legal rights which, in most countries, is not wanted.

Our study has several limitations. The population was small, but it still represents about half the population available at the prison in question at the time of the investigation. Although we found no indications of such, some of the inmates may have tried to manipulate the results by giving untrue answers. Applying the ICD-10-RC retrospectively to data already collected is not as good as testing face-to-face. From an ideal point of view, the time available to observe the inmates in this study was too short. Both diagnostic systems recommend longer periods of observation before making a firm diagnosis of a personality disorder, and some studies have even suggested that 5 years are necessary [17]. In general therefore, a diagnosis of DPD or APD in a forensic setting cannot be made quickly.

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