Challenges assessing personality disorders with the SCID-5-PD in psychiatric patients

CURRENT STATUS: POSTED

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10.21203/rs.3.rs-22789/v1

SUBJECT AREAS
Psychiatry

KEYWORDS
Gestalt, psychiatric interview, co-morbidity, nosology, epistemology, validity
Abstract

**Background:** The SCID-5-PD is frequently used to diagnose personality disorders. The aim of this study is to compare the diagnostic outcomes of the SCID-5-PD with expert clinical assessment in an ICD-10 setting.

**Methods:** A random sample of a total of 30 psychiatric in- and outpatients (mean age = 34 ± 16, 17 males and 13 females) went through a comprehensive clinical assessment conducted by experts. Subsequently, the patients were assessed with the SCID-5-PD by specifically trained novice raters.

**Results:** 55% (n=11) of patients with clinical diagnosis within the schizophrenia spectrum were allocated one or more diagnoses of personality disorder according to the SCID-5-PD, primarily borderline personality disorder (n=6). In contrast, of all patients with a clinical diagnosis outside the schizophrenia spectrum, only one patient qualified for a diagnosis of personality disorder with the SCID-5-PD. Meanwhile, 70% (n=7) of patients with a clinical diagnosis of ICD-10 schizotypal disorder did not meet the criteria for this disorder when assessed with the SCID-5-PD.

**Conclusions:** When considering a differential diagnosis within the schizophrenia spectrum, outcomes from the SCID-5-PD should be interpreted cautiously.

**Background**

Structured interviews are increasingly becoming the gold standard in psychiatric assessment. Diagnostic information is obtained based on the patient’s responses and the clinician’s observations. These interviews attempt to identify symptoms and syndromes, which meet specific diagnostic criteria(1), e.g. the Structured Clinical Interview for DSM-5 Personality Disorders (SCID-5-PD). There is no consensus on a formal definition of the term structured interview. While the SCID-5-PD considers itself a semi-structured interview(2), we consider the interview to be fully structured as it consists of a set of predetermined questions, presented in a definite order(1). This type of interview is popular in research as well as in everyday clinical settings to diagnose a wide variety of psychiatric conditions including personality disorders(3).

These disorders are believed to be of high prevalence in western countries (around 12% in the general population(4)) and even more so among psychiatric inpatients, where the prevalence of
borderline personality disorder (BPD) alone is estimated to be around 20%(5).

The Structured Clinical Interview for DSM-5 Personality Disorders (SCID-5-PD) is frequently used for assessing these disorders.

This interview schedule is widespread also in countries using the ICD-10. When used clinically, the DSM-5 diagnoses are usually converted to their equivalent in the ICD-10. However, there are important differences between the two diagnostic systems: The ICD-10 is a hierarchical system, in which lower order diagnoses such as personality disorders are generally overruled or included by higher order diagnoses such as schizophrenia, unless they are clearly independent conditions.

Patients with schizophrenia are usually not given an additional diagnosis of BPD, because schizophrenia spectrum disorders (SSD) rank higher than personality disorders and disturbances in personality are inherent to schizophrenia. The ICD-10 hierarchy is based on the continental European tradition in psychopathology as described by Jaspers(6). The DSM-5 allows for a higher degree of comorbidity, as it does not have the same hierarchical order. Furthermore, schizotypal disorder is considered a personality disorder in the DSM-5, whereas ICD-10 considers it a higher-order disorder within the schizophrenia spectrum.

The SCID-5-PD suggests a diagnosis of personality disorder when a certain number of diagnostic criteria are met[1]. However, none of the symptoms or diagnostic criteria for personality disorders are specific to personality disorder alone. Similar phenomena can be seen in various psychiatric disorders(7), which makes the process of differential diagnosis paramount. This was the subject of a recent study by Zandersen and Parnas, in which 30 patients diagnosed with BPD underwent a rigorous clinical examination conducted by experts(8). According to this assessment, two thirds of the patients met the criteria for a SSD conforming to DSM-5 and three fourths for ICD-10.

A general challenge in psychiatric diagnosing is the lack of a gold standard for the assessment of psychiatric disorders. Robert Spitzer, one of the creators of the DSM-III and the SCID-5-PD proposed that the validity of structured interviews could be tested against a Longitudinal Expert assessment of All Data (interviews with the patient, relatives, etc. as well as all available clinical records; abbr.
Following Spitzer’s proposal, we decided to investigate how outcomes from the SCID-5-PD correlated with those from expert clinical assessment.

**Methods**

**Aim**

The aim of the study is to compare SCID-5-PD assessments of psychiatric patients with expert assessment using all available information.

**Participants**

A total of 30 hospitalized and outpatient participants were recruited from Mental Health Center Glostrup in the capital region of Denmark. Outpatients were generally in a more stable clinical condition than hospitalized patients. We included both groups in order to study patients across different severities of psychiatric illness.

The inclusion criteria were: 1: Above the age of 18, 2: Primary ICD-10 diagnosis from F20-69, 3: Assessed capable to participate by a treating doctor. The exclusion criteria were: 1. Judicial status, 2. Intellectual disability. These criteria were selected to study psychiatric patients ecologically, without the confounding factors developmental disorders and organic disease. The recruitment of patients took place from 11/4-2019 to 27/10-2019. Hospitalized patients were included randomly until 15 were obtained. Patients from the outpatient clinic were invited consecutively, based on the date of appointment. Of 37 eligible outpatients, 15 were recruited. Two patients were excluded after inclusion: One due to not being able to complete the interview, the other due to an uncertainty in the clinical diagnosis. Two other patients were included instead.

**Assessment**

Clinical diagnoses were assessed according to regular procedure and allocated according to ICD-10. Hospitalized patients were assessed during hospitalization by an attending senior psychiatrist. Diagnoses from previous clinical assessments were either confirmed or changed during hospitalization. This assessment was based on various clinical interviews, observations from caregivers and other doctors during hospitalization as well as written notes from earlier treatment.
and interviews with family members when possible. The assessing senior psychiatrist consulted other
doctors in case of doubt. The outpatients were referred to the outpatient clinic by their psychiatrist,
with the purpose of getting a second opinion of the diagnosis. Here, patients were assessed by a
senior psychiatrist and researcher, LJ. He used a conversational semi-structured interview, in which all
available data was explored prior to the interview. During the interview the patient gave a full
recollection of his or her life with emphasis on psychological and social development as well as clinical
treatment. Potential anomalous self-experiences linked to the schizophrenia spectrum were explored
with the EASE scale (Examination of Anomalous Self-Experience), a semi-structured tool for assessing
self-disturbances(10). In case of doubt, the assessing psychiatrist LJ consulted other senior clinicians
involved in the patient’s treatment. The average conversational semi-structured interview lasted 2,5
hours.

All patients were also assessed with the SCID-5-PD(11). Two graduate students of medicine and
psychology, MB and SF, conducted the interviews. They were trained specifically for administering the
SCID-5-PD in accordance with the SCID training guidelines through a 2-day course provided by the
Danish Psychological Association as well as several practice interviews with patients. The patients
were given the SCID-5-PD-SPQ (12) screening questionnaire of 106 yes/no questions prior to the
interview. Interviews were administered conforming to SCID-5-PD instructions: Items were scored
“threshold” when responses and observations met the general criteria for personality disorder as well
as the individual diagnostic criteria specified for each item in the SCID-5-PD(2). All interviews were
video recorded. The average length of the interview was 1,5 hours. The videos were used for quality
assurance and supervision of the interviewers by experienced psychiatrist and researcher JN.

Results
Table 1 shows demographic data for hospitalized patients and outpatients. Table 2 shows the clinical
ICD-10 diagnoses and the DSM-5 diagnoses from the SCID-5-PD.

A total of 12 patients qualified for at least one SCID-5-PD diagnosis. 11 of them had a clinical
diagnosis within the ICD-10 schizophrenia spectrum. This amounts to 55% of patients with clinical
schizophrenia spectrum diagnoses also qualifying for at least one SCID-5-PD diagnosis (median
number of diagnoses 1, ranging from 1 to 4). The most frequent SCID-5-PD diagnosis for these patients was BPD. 3 of the 10 patients with a clinical diagnosis of schizotypal disorder were diagnosed with schizotypal personality disorder (SPD) with the SCID-5-PD.

**Table 1: Demographics**

| M/F       | Inpatients (Mean, SD) | Outpatients (Mean, SD) | Total (Mean, SD) |
|-----------|-----------------------|------------------------|-----------------|
| Age       | 40, 17 (19-69)        | 27, 11 (19-58)         | 34, 16 (19-69)  |
| Educational level |                |                        |                 |
| Secondary school or less | 11             | 6                      | 17              |
| Highschool | 2                  | 6                      | 8               |
| College   | 0                   | 3                      | 3               |
| University | 2                  | 0                      | 2               |

**Clinical diagnoses (ICD-10)**

| SCID-5-PD Diagnosis (DSM-5) | Paranoid personality disorder | Schizoid personality disorder | Schizotypal personality disorder | Obsessive compulsive personality disorder | Dependent personality disorder | Avoidant personality disorder |
|-----------------------------|--------------------------------|-------------------------------|----------------------------------|------------------------------------------|--------------------------------|-------------------------------|
| Schizophrenia (F20.0-F20.3) | N=1                            | N=1                           | N=4                             | N=3                                      | N=1                            | N=3                           |
| Simple schizophrenia (F20.6)| 0                              | 1                             | 0                               | 0                                        | 2                               |                               |
| Schizotypal disorder (F21)  | 0                              | 0                             | 3                               | 1                                        | 0                               | 0                             |
| Affective disorders (F30-F39)| 0                              | 0                             | 0                               | 0                                        | 0                               | 0                             |
| Reaction to severe stress, and adjustment disorders (F43.0-F43.9)| 0                              | 0                             | 0                               | 1                                        | 0                               | 0                             |
| Asperger’s syndrome (F84.5) | 0                              | 0                             | 0                               | 0                                        | 0                               | 0                             |
| Schizophrenia spectrum group | 1                              | 1                             | 4                               | 2                                        | 1                               | 3                             |

N in the left column is the number of patients with clinical diagnoses within a certain ICD-10 category.
N in the top row is the total number of each personality disorder diagnosis allocated with the SCID-5-PD. Numbers in the remaining cells display how many patients from each ICD-10 category qualified for a specific diagnosis of personality disorder with the SCID-5-PD. Note that patients may have multiple SCID-5-PD diagnoses, e.g. the schizophrenia group has a total of 8 diagnoses allocated among 7 patients.

a: Schizophrenia spectrum group includes all patients with clinical diagnoses of schizophrenia, simple schizophrenia and schizotypal disorder.

Discussion

55% of the examined patients with a clinical diagnosis within the schizophrenia spectrum qualified for one or more diagnoses of personality disorder according to the SCID-5-PD, most frequently BPD. Interestingly, SPD was not found in 7 of 10 patients clinically diagnosed with schizotypal disorder. These findings are in line with the study by Zandersen and Parnas cited in the background section(8).

Additionally, Moore, Green and Carr(13) studied a large sample of patients diagnosed with schizophrenia (n=549). The participants were screened with the International Personality Disorder Examination Questionnaire (IPDEQ)(14) and outcomes were compared to those of healthy controls. The study found that patients suffering from schizophrenia were 8 times more likely to screen positive for a personality disorder than a healthy control. Patients with schizophrenia were also more likely to screen positive for personality disorders across clusters than healthy controls. While these results are similar to ours, they are interpreted as co-morbidity and linked to specific prognostic outcomes. There is little discussion regarding the possible connection between the altered personality and the underlying condition of schizophrenia. Our findings too could be understood as a reflection of co-morbidity, i.e. the personality disorders are co-morbid to schizophrenia. However, co-morbidity in ICD-10 is only relevant for disorders that are not aspects of the same clinical entity. SSD patients often exhibit disturbances that superficially mimic personality disorders but are, in fact, expressions of a more profound psychopathology(15,16).

It is not always clear what kind of phenomena the diagnostic criteria for a personality disorder cover. An example of this is the BPD criteria of “identity disturbance” and “chronic feelings of emptiness”
that can be interpreted at different levels. At a personal or narrative level, identity disturbance can reflect confusion regarding career choices, social and romantic relationships etc., whereas identity disturbance at the level of the minimal or core self reflects “[…] distortions of first-person perspective, incomplete sense of substantiality-embodiment, and an ephemeral sense of self-presence”(17). These are psychopathological phenomena often seen in patients with SSD. Similarly, feelings of emptiness at the narrative level can refer to a lack of values or direction in life. At the level of the minimal self, these feelings reflect different kinds of depersonalization linked to SSD(17). As the SCID-5-PD contains no instructions or tools for differentiating psychopathology at a structural level, it is possible for patients with SSD to be misdiagnosed with a personality disorder. This may result in a patient not getting indispensable antipsychotic medication.

The potential mistake of overlooking a condition of schizophrenia may not be a weakness inherent to the design of the SCID-5-PD. This interview is not meant to differentiate between broad categories of psychiatric illnesses, but only to assess personality disorders as described in the DSM-5. However, in clinical work the SCID-5-PD is often used as sole diagnostic instrument when a diagnosis of personality disorder is suspected. It is difficult to find quantitative data of the extent of such sub-optimal clinical practices. The user guide of the SCID-5-PD itself presents an example. This is a clinical case, meant to serve as a tutorial of how the interview should be conducted. In this scenario, a young man is referred to the psychiatric department by his general practitioner, after he unexpectedly bursts into tears during a routine check. Upon entering the psychiatrist’s office, he exhibits unusual behaviour, including displaying a copy of a dollar bill with the patient’s face glued on instead of George Washington’s (2).

If any sort of general psychiatric assessment is performed, mention of it is omitted in the user guide. The patient is assessed with the SCID-5-PD and given multiple diagnoses of personality disorder.

A different problem may arise when a psychotic condition is established prior to the administration of the SCID-5-PD. In this case, answers are considered invalid if they exclusively relate to events occurring during psychotic or affective episodes. According to the SCID-PD guidelines the interviewer is supposed to ask directly if the answers provided occur outside these episodes(11). This question
presupposes that the patient knows what is meant by the term “psychosis” and can delimit psychotic states temporally. This distinction, if at all possible, requires a high level of insight into illness(18). Although there is no consensus on the definition of the concept of insight into illness, it is generally recognized that schizophrenic patients frequently suffer from a lack thereof(19).

The diagnostic criteria in DSM-5 and ICD-10 are meant to delimit the different mental conditions, not to be comprehensive descriptions of the psychopathology inherent to specific disorders(5,20). As the SCID-5-PD treats the criteria for personality disorders as discrete entities of equal diagnostic importance, it can be challenging for the clinician to grasp the overall clinical picture in the absence of a more comprehensive psychiatric assessment(3,7,21). Most diagnostic criteria are, in themselves, not specific for any disorder(22): The diagnostic specificity emerges from the interaction between the symptoms and signs of the disorder. The meaningful unit of parts that emerges is called the Gestalt. Multiple interwoven sources add to the Gestalt such as the patient’s history, the context, the relation to other experiences, the form and content of the experience(23,24). In the diagnostic process there are reciprocal dependencies between the whole and its single features. When the unifying Gestalt is not engaged, these single features may appear as a conglomerate of different disease entities, creating the co-morbidity that characterizes a structured, polythetic diagnostic approach(25).

According to Jaspers, the specificity of mental disorders is not graspable at the level of singular symptoms and signs, but only at the level of the Gestalt(6). Grasping the Gestalt may be particularly challenging when differentiating personality disorder from SSD, an endeavour for which a fully structured interview may not suffice.

Limitations
The major limitation for this study is the small sample size, which cannot be assumed to be representative. Furthermore, all outpatients were referred to the clinic with the purpose of getting a second opinion, as they were difficult to diagnose. It is likely that this subsample is not representative of a normal patient population.

It could also be argued that part of the discrepancy between the expert assessment and the SCID-5-PD assessment could be attributed to the use of novice raters conducting the SCID-5-PD interviews.
However, a study from Ventura et al. (26) suggests that differences in reliability and diagnostic accuracy between structured interviews performed by trained novice raters and experienced raters are not significant.

**Conclusion**

Even though the SCID-5-PD includes differential diagnostic notes and questions, schizophrenia-spectrum disorders may be misinterpreted as personality disorder in the absence of comprehensive differential diagnosis. Furthermore, cases of schizotypal disorder may be misinterpreted or overlooked if no other psychiatric assessment is conducted. Further research with larger and more representative samples is needed to elucidate these problems.

**Abbreviations**

**SCID-5-PD:** Structured Clinical Interview for DSM-5, Personality Disorders

**BPD:** Borderline personality disorder

**SPD:** Schizotypal personality disorder (This term is used in DSM-5 and not in ICD-10, as schizotypal disorder is not considered to be a personality disorder in ICD-10)

**SSD:** Schizophrenia spectrum disorder

**Declarations**

**Ethics approval and consent to participate**

This study was registered and approved by the Danish Knowledge Centre on Data Protection Compliance (approval no. P-2019-09). All recruited patients had to sign an informed consent statement in order to participate in the study. Patients were given a minimum of 24 hours to decide whether to participate or not and were informed of their legal rights as medical research subjects, including the right to revoke consent at any time. As the study did not involve clinical trials, no approval of ethics was required by Danish standards.

**Consent for publication**

Not applicable

**Availability of data and materials**

The datasets generated and/or analysed during the current study are not publicly available due to reasons concerning the privacy of the patients but are available from the corresponding author on
reasonable request.

**Competing interests**

The authors declare that they have no conflict of interest.

**Funding**

This study was funded by the Lundbeck Foundation. The Lundbeck Foundation was not involved in any stage of this study.

**Authors' contributions**

MB and SF performed the SCID-interviews for this study. MB wrote this article with the collaboration of SF. JN designed the study and provided ongoing quality assuring feedback regarding the SCID-5-PD interviews, as well as critique, additions and suggestions for the article. LJ assessed all outpatients at the ambulatory clinic and provided critique and suggestions for the article. All authors contributed to the final article.

**Acknowledgements**

We thank Dr. Josef Parnas for his valuable contribution to this study.

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