

# Dual Diagnosis Screening Interview

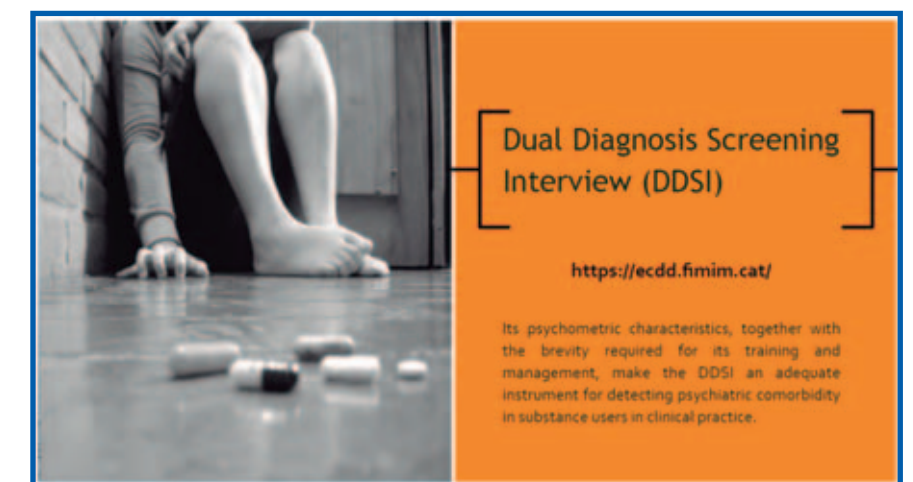
## <https://ecdd.fimim.cat>

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## Introduction

To identify psychiatric comorbidity among individuals with substance use disorders (SUDs) is an area of great clinical and public health interest. Drug users with other psychiatric comorbid disorders have more emergency admissions, higher prevalence of suicide, medical conditions (e.g. HIV and HCV infection) and social problems than those who have only SUDs or other psychiatric diagnoses (1). Moreover, the treatment of SUD patients with comorbid psychiatric disorders is considered more complex and with poorer prognosis. Thus, the correct detection of other psychiatric conditions among substance users is crucial to adequately manage these patients.



## Aim

The objective of this study was to develop and validate a brief tool, the Dual Diagnosis Screening Instrument (DDSI) (2), to screen psychiatric disorders in substance users in treatment and non-treatment-seeking samples.

## Methods

A total of 827 substance users (66.5% male, mean age 28.6 ± 9.9 years) recruited in treatment (in- and outpatient) and non-treatment (substance user volunteers in university research studies) settings were assessed by trained interviewers using the DDSI and the Psychiatric Research Interview for Substance and Mental Disorders (PRISM) (3) as the criterion standard. Both instruments were administered blind to the results of the other. Disorders obtained with the DDSI were compared to lifetime diagnoses obtained with the PRISM. Sensitivity, specificity, negative, and positive predictive values were estimated. Also test-retest reliability of the DDSI was assessed.

## Results

The DDSI showed a high sensitivity (≥ 80%) for identifying lifetime depression, mania, psychosis, panic, social phobia, and specific phobia disorders. Specificity was ≥ 82% for those diagnoses. Test-retest k showed excellent agreement (range 81–95%). The mean duration of the DDSI administration was 16.8 ± 2.5 min.

Table 1. Sociodemographic data of the sample (n = 827) divided by groups

|                               | Treatment settings       |                           | Nontreatment settings             | p value* |
|-------------------------------|--------------------------|---------------------------|-----------------------------------|----------|
|                               | inpatients, %<br>n = 172 | outpatients, %<br>n = 196 | research volunteers, %<br>n = 459 |          |
| Age (±SD)                     | 38.9±9.9                 | 32.3±9.2                  | 23.1±3.6                          | <0.001   |
| Men                           | 118 (68.6)               | 125 (63.8)                | 307 (66.9)                        | 0.559    |
| Marital status                |                          |                           |                                   | <0.001   |
| Single                        | 85 (49.4)                | 58 (29.6)                 | 430 (93.7)                        |          |
| Married/couple                | 54 (31.4)                | 71 (36.2)                 | 22 (4.8)                          |          |
| Divorced                      | 33 (19.2)                | 67 (34.2)                 | 7 (1.5)                           |          |
| Education, years (±SD)        | 10.1±1                   | 11.48±1.2                 | 14.8±1.3                          | <0.001   |
| Arrested                      | 40 (23.3)                | 50 (25.5)                 | 34 (7.4)                          | <0.001   |
| Work                          |                          |                           |                                   | <0.001   |
| Working                       | 44 (25.6)                | 60 (30.6)                 | 184 (40.1)                        |          |
| Unemployed                    | 70 (40.7)                | 87 (44.4)                 | 74 (16.1)                         |          |
| Studying                      | 8 (4.6)                  | 5 (2.6)                   | 195 (42.5)                        |          |
| Disability/retired/sick leave | 50 (29.1)                | 44 (22.5)                 | 6 (1.3)                           |          |

\* p values correspond to ANOVA and  $\chi^2$  test, depending on whether the variables compared were quantitative or qualitative.

Table 2. Lifetime PRISM diagnoses by recruitment sites

|                             | Treatment settings  |             | Nontreatment settings |            | Total                |            |                  |     |
|-----------------------------|---------------------|-------------|-----------------------|------------|----------------------|------------|------------------|-----|
|                             | inpatients          | outpatients | research volunteers   |            |                      |            |                  |     |
|                             | n cases/% (95% CI)  | n assessed  | n cases/% (95% CI)    | n assessed | % (95% CI)           | n assessed |                  |     |
| Depression                  | 65/37.8 (30.9–45.2) | 172         | 37/31.1 (23.5–39.9)   | 119        | 57/16.7 (13.1–21.0)  | 341        | 25.2 (21.9–28.7) | 632 |
| Mania                       | 8/4.65 (2.4–8.9)    | 172         | 3/2.5 (0.9–7.1)       | 119        | 2/0.6 (0.02–2.1)     | 341        | 2.1 (1.2–3.5)    | 632 |
| Panic                       | 11/6.4 (3.6–11.1)   | 172         | 7/5.9 (2.9–11.6)      | 119        | 2/0.6 (0.02–2.1)     | 341        | 3.2 (2.1–4.8)    | 632 |
| Social phobia               | 8/4.65 (2.4–8.9)    | 172         | 5/2.5 (0.1–5.8)       | 196        | 0                    | 459        | 1.6 (0.9–2.7)    | 827 |
| Simple phobia               | 6/7.1 (3.3–14.7)    | 84          | 3/3.8 (0.1–10.7)      | 78         | 2/0.74 (0.02–2.6)    | 272        | 2.5 (1.4–4.5)    | 434 |
| Psychosis                   | 38/22.1 (16.5–28.9) | 172         | 19/9.7 (6.3–14.6)     | 196        | 8/1.74 (0.89–3.4)    | 459        | 7.9 (6.2–9.9)    | 827 |
| ADHD                        | –                   | –           | 9/37.5 (21.2–57.3)    | 24         | 6/18.75 (8.9–35.3)   | 32         | 26.8 (17–39.6)   | 56  |
| PTSD                        | –                   | –           | 14/41.2 (26.4–57.8)   | 34         | 0                    | 27         | 23.0 (14.2–34.9) | 61  |
| Alcohol                     | 98/57 (49.5–64.1)   | 172         | 102/52.0 (45.1–58.9)  | 196        | 109/23.7 (20.1–27.8) | 459        | 37.4 (34.2–40.7) | 827 |
| Cannabis                    | 62/36.1 (29.2–43.4) | 172         | 49/25 (19.5–31.5)     | 196        | 195/42.5 (38.0–47.0) | 459        | 37.0 (33.8–40.3) | 827 |
| Cocaine                     | 85/49.4 (42.0–56.8) | 172         | 88/44.9 (38.1–51.9)   | 196        | 95/20.70 (17.2–24.6) | 459        | 32.4 (29.3–35.7) | 827 |
| Opioids (heroin, methadone) | 35/20.35 (15.0–27)  | 172         | 89/45.4 (38.6–52.4)   | 196        | 15/3.3 (2.0–5.3)     | 459        | 16.8 (14.4–19.5) | 827 |
| Hallucinogens               | 5/2.91 (1.2–6.6)    | 172         | 16/8.2 (5.1–12.8)     | 196        | 16/3.5 (2.2–5.6)     | 459        | 4.5 (3.3–6.1)    | 827 |
| Sedatives                   | 36/20.9 (15.5–27.6) | 172         | 30/15.3 (10.9–21.0)   | 196        | 4/0.9 (0.3–2.2)      | 459        | 8.5 (6.7–10.6)   | 827 |
| Stimulants                  | 14/8.1 (4.9–13.2)   | 172         | 20/10.2 (6.7–15.2)    | 196        | 26/5.7 (3.9–8.2)     | 459        | 7.2 (5.7–9.2)    | 827 |

Table 3. Psychometric properties of the DDSI

|                             | Treatment settings  |             | Nontreatment settings |            | Total                |            |                  |     |
|-----------------------------|---------------------|-------------|-----------------------|------------|----------------------|------------|------------------|-----|
|                             | inpatients          | outpatients | research volunteers   |            |                      |            |                  |     |
|                             | n cases/% (95% CI)  | n assessed  | n cases/% (95% CI)    | n assessed | % (95% CI)           | n assessed |                  |     |
| Depression                  | 65/37.8 (30.9–45.2) | 172         | 37/31.1 (23.5–39.9)   | 119        | 57/16.7 (13.1–21.0)  | 341        | 25.2 (21.9–28.7) | 632 |
| Mania                       | 8/4.65 (2.4–8.9)    | 172         | 3/2.5 (0.9–7.1)       | 119        | 2/0.6 (0.02–2.1)     | 341        | 2.1 (1.2–3.5)    | 632 |
| Panic                       | 11/6.4 (3.6–11.1)   | 172         | 7/5.9 (2.9–11.6)      | 119        | 2/0.6 (0.02–2.1)     | 341        | 3.2 (2.1–4.8)    | 632 |
| Social phobia               | 8/4.65 (2.4–8.9)    | 172         | 5/2.5 (0.1–5.8)       | 196        | 0                    | 459        | 1.6 (0.9–2.7)    | 827 |
| Simple phobia               | 6/7.1 (3.3–14.7)    | 84          | 3/3.8 (0.1–10.7)      | 78         | 2/0.74 (0.02–2.6)    | 272        | 2.5 (1.4–4.5)    | 434 |
| Psychosis                   | 38/22.1 (16.5–28.9) | 172         | 19/9.7 (6.3–14.6)     | 196        | 8/1.74 (0.89–3.4)    | 459        | 7.9 (6.2–9.9)    | 827 |
| ADHD                        | –                   | –           | 9/37.5 (21.2–57.3)    | 24         | 6/18.75 (8.9–35.3)   | 32         | 26.8 (17–39.6)   | 56  |
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## Conclusion

The DDSI is a valid and easy-to-administer screening tool to detect possible psychiatric comorbidity among substance users.

## References

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## Foundings:

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