

# Borderline personality disorder, drug use disorder, and worsening depression or substance abuse are significant predictors of suicide attempts in people with Axis I and II disorders

Yen S, Shea T, Pagano M, *et al.* Axis I and Axis II disorders as predictors of prospective suicide attempts: findings from the collaborative longitudinal personality disorders study. *J Abnorm Psychol* 2003;**112**:375–81.

## Q What are the diagnostic predictors of suicide attempts in people with Axis I and Axis II disorders?

### METHODS

 **Design:** Prospective longitudinal study.

 **Follow up period:** Two years. Participants interviewed at 6 months, 1 year, and 2 years.

 **Setting:** Clinics in Providence, New York, Boston, and New Haven, USA; time frame not stated.

 **People:** 668 people (aged 18–45 years) with a diagnosed personality disorder (Diagnostic Interview for DSM-IV Personality Disorders), or major depressive disorder (Structured Clinical Interview for DSM-IV Axis I Disorders-patient version). Included personality disorders were: schizotypal, borderline, avoidant, and obsessive-compulsive. Exclusions: acute substance intoxication or withdrawal; active psychosis; IQ of 85 or less; cognitive impairment; or history of schizophrenia, schizopreniform, or schizoaffective disorders.

 **Risk factors:** The semi-structured Longitudinal Interval Follow-Up Evaluation (LIFE) interview system was used to assess the course of the disorder and functioning. Using the information from LIFE, weekly psychiatric status ratings (PSRs) were made for each Axis I disorder. Major depressive disorder was rated on a 6 point scale, ranging from PSR1 (full remission) to PSR6 (full criteria for major depressive disorder). All other disorders were rated on a 3 point scale, from PSR1 (full remission) to PSR3 (full criteria for personality disorder). Increases in PSRs were interpreted as a worsening of disease.

 **Outcomes:** Incidence of suicide attempts (judged by LIFE intent and medical threat ratings).

### MAIN RESULTS

Among the Axis II disorders, only borderline personality disorder (BPD) was a significant predictor of suicide attempts (AR 20.5%; OR 2.80, 95% CI 1.26 to 6.64). Among the Axis I disorders, only drug use disorder was a significant predictor of suicide attempts (AR 22.4%; OR 3.53, 95% CI 1.08 to 4.68). Controlling for BPD diagnosis, worsening of major depressive disorder, alcohol use, and drug use were significant predictors of suicide attempt (major depressive disorder: RR = 1.60, 95% CI 1.29 to 2.00; alcohol use: RR = 1.74, 95% CI 1.13 to 2.68; drug use: RR = 2.11, 95% CI 1.43 to 3.12).

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### CONCLUSIONS

Baseline diagnoses of BPD or drug use disorder are significant predictors of suicide attempts within 2 years. Worsening of depression and substance abuse are significant predictors of suicide attempts within the next month.

### NOTES

Analysis was only carried out on 621 participants who had at least 1 year follow up. Authors note that recall bias may result from retrospective information gathering from participants. There was no interviewer blinding regarding suicide attempts during the period being evaluated, which could bias recording of PSRs. However, interviewers were not aware of study hypotheses and several Axis I disorders previously described as predictors were not significant in this study. The reliability of the LIFE suicide behaviour assessment has not been tested.

### Commentary

This study examines diagnostic predictors of suicide attempts in a patient cohort comprising four groups with personality disorders and a comparison group with major depressive disorder. The study sits within a body of epidemiological literature that has examined risk factors for suicidal behaviours with the explicit or implicit aim of assisting clinicians to identify and intervene with patients at heightened risk.

The study is impressive, overcoming many of the methodological limitations of earlier work (eg small sample sizes, insufficient follow up periods, lack of appropriate comparators, limited range of predictor variables). The authors followed 621 patients for at least a year, in order to determine whether suicide attempts are predicted by baseline diagnosis and/or by worsening symptomatology close to the event (ie distal and proximal risk factors, albeit primarily clinical only).

They meticulously categorised suicide attempts, distinguishing them from suicidal gestures on the basis of intent and medical threat. This is significant, given the tendency of some patients with personality disorders to make attention seeking or mood regulating suicidal gestures.<sup>1</sup> Suicidal gestures are included with non-attempters in the analysis. While this is appropriate given the research questions, it would have been of interest to examine them as a separate group to determine whether their risk factor profile varies from both attempters and non-attempters.

Yen *et al* show that baseline borderline personality disorder and drug use disorders predict suicide attempts, as does deterioration in the course of major depressive disorder and substance use disorders. While this information is neither specific nor sensitive enough to help clinicians predict suicidal behaviour in the individual case,<sup>2</sup> it is of clinical relevance in that it points to the need to ensure that all patients with personality disorders receive optimal care, including appropriate monitoring of related symptomatology and careful, individualised assessment of suicide risk.

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1 Kemperman I, Russ MJ, Shearin E. Self-injurious behavior and mood regulation in borderline patients. *J Personal Disord* 1997;**11**:146–57.

2 Hughes DH. Can the clinician predict suicide? *Psychiatr Serv* 1995;**46**:449–51.