Role of Intense Affects in Predicting Short-term Risk for Suicidal Behavior

A Prospective Study

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Abstract: We examined the utility of the Affective States Questionnaire (ASQ) in predicting acute risk for suicidal behavior. Subjects at a VHA Medical Center were interviewed using the ASQ and again 3 months later when their suicidal behaviors over that period were examined. The ASQ had a sensitivity of 60% for predicting suicidal behavior over the follow-up period, and specificity of 74%. The false positive rate was relatively low for a sample not highly selected for suicide risk and utilizing a short period of 3 months for suicidal behavior. Subgroups combining the ASQ with disability level or a diagnosis of substance abuse greatly reduced the percentage of false positives. The ASQ is able to improve significantly our ability to predict acute risk of suicidal behavior in clinical psychiatric populations.

Key Words: Predicting suicidal behavior, suicidal behavior in veterans, acute or short-term risk for suicidal behavior, intense affects and suicidal behavior, desperation and suicidal behavior.

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"The rarity of suicide, even in groups known to be at higher risk than the general population, contributes to the impossibility of predicting suicide" (American Psychiatric Association, 2004). This sentence in an American Psychiatric Association guideline on suicidal behavior expresses what has understandably been the accepted wisdom in psychiatry for a long time. The primary substantive basis for such a conclusion was provided in a landmark study by Pokorny in 1983.

Pokorny tested a sample of 4800 consecutive psychiatric inpatients at a Veterans Health Administration (VHA) Hospital using scales known to measure high-risk factors for suicide. During a 5-year follow-up period, "only 35 of the 63 patients who actually committed suicide were correctly identified . . . at the cost of 1206 false positive identifications" (a positive predictive value of less than 3%). Pokorny discussed the difficulties of prediction and concluded that suicide prediction was "not currently feasible." Pokorny wrote that he would feel differently about prediction if the true positives and false positives were about equal i.e., if a positive predictive value of 50% could be achieved (Pokorny, 1983).

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In 1985, Beck and his colleagues published the results of a 10-year prospective study demonstrating that among patients hospitalized with suicidal ideation, hopelessness was the best predictor of long-term risk for suicide (Beck et al., 1985). Beck pointed out, however, that the "overwhelming" number of false positives limited the predictive value of the Beck Hopelessness Scale (BHS). Furthermore, a 20-year follow-up study of outpatients not selected for suicidal behavior, while confirming that high BHS scores are associated with risk for suicide, revealed a positive predictive value of only 1%. Finally, the benefit of hopelessness as a predictor of short-term risk (within a year) has been even less evident (Fawcett et al., 1987).

Based on these findings, the consensus among suicide experts has been that there are not yet adequate tools for the determination of acute risk for suicide (Oquendo et al., 2003; Simon 2004, 2006; Rudd et al., 2006).

The limitations of suicide assessment tools led us to undertake a close examination of the period immediately before suicide. In the earlier phases of this work (Hendin et al., 2001, 2004), detailed data were obtained from the therapists of psychiatric patients who committed suicide. We used written and verbal reports from therapists of what their patients were feeling and experiencing in their lives in the period immediately before they committed suicide and contrasted these with reports on comparably depressed patients who were not suicidal seen by these same therapists. We found the suicides were preceded by a distinct, time-limited psychological state of suicide crisis that was marked by the following 3 factors that usually occurred in combinations of 2 or 3 in a single patient: a precipitating event, behavioral changes, and intense affective states.

Intense affective states that were intolerable and uncontrollable, proved to be the most related factors of suicide (Maltsberger et al., 2003; Hendin et al., 2004, 2007). The uncontrollable nature of the affects engendered fear on the part of patients they were fragmenting, i.e., "falling apart." The following 9 affects were examined: anxiety, rage, desperation, abandonment, loneliness, hopelessness, self-hatred, guilt, and humiliation. A striking contrast was evident in the affective responses of the patients who went on to suicide and the comparably depressed patients who were not suicidal. Just before death, the suicides averaged more than 3 times the number of intense affects than comparably depressed nonsuicidal patients. These differences remained when controlled for severity of depression, comorbid Axis I diagnoses, and borderline personality disorders. This work permitted us to develop the Affective States Questionnaire (ASQ) (Hendin et al., 2004, 2007).

METHODOLOGY

We are now testing the ASQ prospectively for its ability to predict acute risk (within 3 months) for suicidal behavior. We welcomed the opportunity to do so at a Veterans' Affairs Medical Center since suicidal behavior and suicide have been ongoing

problems for combat veterans and particularly recently with returning veterans of the Iraq war.

The success of the ASQ appeared to lie in part in not asking questions about suicide while focusing on the patient's affective state. Patients who wish to be discharged from a psychiatric hospital, or fear being admitted to one, have reason to deny their suicidal intent (Isometsä et al., 1995). We learned from our past work that patients who denied that they were contemplating suicide either because they were afraid of the consequences of doing so, or were unaware that they were emotionally out of control in ways that were self-destructive, nevertheless had ASQ scores that correctly predicted their suicidal behavior. For this reason, we concluded that the measure we use for suicidal behavior should not be administered when administering the ASQ.

The difficulties with suicide prediction identified by Pokorny are less applicable to nonfatal suicidal behavior which, since it is less rare, lends itself more readily to prediction. Thus, in the current study, we examine the ability of the ASQ to assess risk of suicidal behavior. We also examine whether patients can be further specified in terms of their risk when the ASQ is combined with other variables. Patients from the inpatient and outpatient units at the Michael De Bakey VA Medical Center in Houston, Texas with primary affective disorder were recruited, as well as patients with anxiety disorder or substance abuse with affective comorbidity. After signing an informed consent form that explained in detail the procedures to be followed, qualified subjects were evaluated with the ASQ for suicide risk at a baseline interview; they were seen again 3 months later and their suicidal behaviors were assessed. Patients received $10 compensation for each visit for their time and transportation costs.

We initially pilot tested the ASQ with a group of 254 patients, which enabled us to make some improvements in the wording of questions and also to increase the number of scoring categories from 3 to 5 in determining if an affect was intense. In factor analyses done on the current study sample of 283, the 7-item ASQ formed a single factor and was internally consistent (Cronbach alpha = 0.77). This sample was also evaluated initially and again after 3 months.

Baseline Assessment Procedures

A "Demographic Face Sheet" taken from the patients' charts was prepared indicating the patient's age, sex, marital status, psychiatric diagnosis (including substance abuse), and their status as an inpatient or an outpatient. The diagnosis was made by the physician who first saw the patient and who was not a participant in the project.

The "Quick Inventory of Depressive Symptomatology-Self-Report (QIDS-SR)" (Rush et al., 2003) was completed by the patient. Since virtually all patients in our past work exhibited at least moderate depressive symptoms, and we wished to study the impact of the level of depression on suicidal behavior, the presence of moderate symptoms of depression as measured by a score of 12 or more on the QIDS-SR was a criterion for inclusion in the study. A score of 18 or over out of a possible 27 gave us the minimum number of false positives (our major goal) with a significant number of true positives.

The "Affective States Questionnaire (ASQ)" that asks about the intensity of the 9 affects listed above was administered by an independent, trained research assistant. The ASQ uses a 5-point scale to rate the affects as follows: (1) not at all, (2) mild, (3) moderate, (4) severe, and (5) extreme. Based on our previous work and pilot studies in the current project, a rating of severe or extreme qualified as intense. Scoring positive was determined by having at least 3 of the 7 affects correlated with suicidal behavior endorsed as severe or extreme: that number had been shown in our earlier work to distinguish depressed patients who were suicidal from those who were not (Hendin et al., 2004, 2007).

A Modified Sheehan Disability Scale was employed as a secondary predictive measure of deterioration in the patient's life functioning and behavior. The Sheehan Disability Scale (Leon et al., 1991) is a three point self-report scale that inquires whether patients' symptoms are interfering with work, family, or social life. We had not needed an instrument like the Sheehan in our previous work because the patients had been in ongoing psychotherapy, so it was possible for therapists to rate deterioration in the patient's social, family, and work adjustment. Here, patients were being questioned by an interviewer who did not know them and was not taking their history.

Sheehan responses are measured on a Likert scale (1–10). We did not use Question 1 dealing with work adjustment since a significant number of veterans were on disability pensions, did not regard the question as applicable, and we did not have that information. We modified the Sheehan and asked whether "emotional problems" rather than "symptoms" were interfering with family or social life because our past work and pilot studies indicated that more information was obtained in this way. We also added what are now Questions 3 and 4 because all of our previous work indicated that emotional dyscontrol and mental disintegration ("falling apart") were central to the suicide crisis that culminated in suicide. The use of the Modified Sheehan Scale proved to be merited by the specificity it added to the predictive power of the ASQ in those patients who were ASQ positive.

The Cronbach alpha for these 4 items was 0.84 with similar correlations among the items, so the items were summed up for a total score. Scores of 36 or more, out of a maximum of 40, on the 4 questions gave us a minimum number of false positives while predicting a significant number of the patients whose emotional problems were severely interfering with their life-functioning and went on to suicidal behavior.

Procedures for Conducting ASQ Follow-up (Visit 2)

The patients were seen originally and in the follow-up by the same interviewer. Research personnel subsequently telephoned all patients who completed an ASQ interview at Visit 1 to schedule a Visit 2 follow-up interview. Patients were contacted by phone within 2 weeks of their 3-month follow-up visit. If we were unsuccessful in contacting patients by telephone, or by contacting relatives, spouses, etc., a letter was mailed to both the address provided by the patients at Visit 1, and the address reflected in the VHA electronic medical record.

If patients were not located, a thorough check of the patient's VHA electronic medical record was reviewed to verify the patient's participation in VHA medical services during the follow-up period. If all efforts to locate a patient failed, a search of the National Death Index was conducted to rule out death. Of the 283 cases evaluated on Visit 1, we have results for 240. About 43 patients completed Visit 1 but not Visit 2. One patient died of natural causes. Eight patients could not be located after Visit 1. The records of these 8 patients were checked at the Bureau of Vital Statistics for any record of death. None had a death certificate on file. Three patients had returned to active duty and were currently deployed in the Middle East. Nine patients were incarcerated during the follow-up period. Of the 43 patients, 22 moved during the follow-up period, but have resurfaced since the project was completed.

During the second visit, the Columbia-Suicide Severity Rating Scale (C-SSRS) that records suicidal behavior on the basis of attempts, nonsuicidal self-injurious behavior, interrupted attempts, aborted attempts, and preparatory acts or behaviors was administered (Posner et al., 2005). The C-SSRS distinguishes suicide attempts and all other suicidal behavior from "self-harm" in that some degree of intent to die must be present in the attempt and all the other forms of suicidal behavior. Self-harm includes only deliberate acts that result in physical injury regardless of intent to die. To the C-SSRS categories, we added hospitalization, instituted or recom-

mended by an evaluating or treating physician as necessary to prevent suicide, which has been found to be a useful measure of a patient becoming suicidal or of treatment failure (Meltzer et al., 2003). Initiating hospitalization because patients are deemed at risk would seem to be a behavior only on the part of clinicians, not patients. In practice, it is usually the result of patients' self-destructive behavior or their communicating that they were suicidal; such communication is also a form of behavior. In any case, the hospitalization usually reflects a significant change for the worse from when they were first seen.

The Quick Inventory of Depressive Symptoms and the Modified Sheehan Disability Scale were administered to patients during the follow-up visit.

At any point during the project, if the patient revealed suicidal intentions, the interviewer was instructed to inform immediately the therapist in charge of the case.

Baseline demographics were compared between subjects who went on to suicidal behavior versus those who did not, using *chi square* test for categorical data and group *t* test for continuous measures. Rates of sensitivity and specificity were generated using the ASQ to predict suicidal behavior identified by the C-SSRS. A *phi* coefficient was used to examine the association between the ASQ and the C-SSRS.

RESULTS

Demographics

The patients' ages ranged from 23 to 74. About 25% of the patients were aged between 23 and 40, 61% were between 40 and 60, and 14% were between 60 and 74. The mean age of the patients was 51. Age did not differentiate those patients who went on to suicidal behavior from those who did not. About 85% percent of the patients were men, but there was no significant difference between the sexes in the frequency with which they went on to suicidal behavior. About 49% of the patients were white; 39% were African American. About 23% of the whites and 12% of the African Americans went on to suicidal behavior. That difference was statistically significant ($X^2 = 4.57$, $df = 1$, $p = 0.033$). The most significant difference in vulnerability to suicidal behavior was between inpatients and outpatients. Inpatients comprised 20% of the subjects but were responsible for over 70% of the cases that went on to suicidal behavior ($X^2 = 4.57$, $df = 1$, $p = 0.0001$). Marital status was a protective factor. About 35% of the patients who did not go on to suicidal behavior were married compared with 20% of the C-SSRS positive subjects ($X^2 = 8.75$, $df = 3$, $p = 0.033$).

Psychiatric Disorders

The major Axis I diagnoses for the 240 subjects in the study were Anxiety Disorders (41%), Major Depressive Disorder (33%), Posttraumatic Stress Disorder (PTSD) (20%), and Bipolar Disorder (16%). The major secondary Axis I disorder was Substance Abuse (which included all drugs and alcohol) present in 43% of patients. Of all subjects, 30% who went on to suicidal behavior were bipolar compared with 14% of the patients who were not bipolar who did so ($X^2 = 6.67$; $p = 0.0010$). Among the 43 patients we could not follow, 40% had been diagnosed with PTSD compared with 20% of those we could follow ($X^2 = 7.45$, $p = 0.006$).

ASQ's Ability to Predict Suicidal Behavior

The ASQ was able to predict 24 of the 40 cases that went on to suicidal behavior within 3 months with a sensitivity of 60%. It was able to predict 148 of the true negatives which gave it a specificity of 74%. There were 52 false positives and 16 false negatives among the 240 cases, which meant that it had a positive predictive power of 32% (Table 1). Post hoc Receiver Operating Characteristic (ROC) curve analysis supported our cut-off of 3 or more affects rated as severe or extreme. Substantial declines in specificity occurred at lower cut-offs without much advantage in terms of increased sensitivity.

QIDS, Modified Sheehan Disability Scores, and Substance Abuse

Neither the mean QIDS scores for depression nor the mean Modified Sheehan Disability Scales scores reflecting a loss of emotional control indicated an increased likelihood for suicidal behavior in patients who were ASQ positive. When high scores on either the QIDS (18+ with a maximum of 27) or the Modified Sheehan (36+ with a maximum of 40) were combined with ASQ positive cases, the picture was different. The high scores did not identify as many true positives, but decreased the likelihood that there would be false positives i.e., patients who did not go on to suicidal behavior. This effect was more significant with the Modified Sheehan; the specificity increased from 74% to 94% (Table 2).

TABLE 1. ASQ's Ability to Predict Suicidal Behavior ($n = 240$)

True Positives (TP)	False Negatives (FN)	Sensitivity TP/(TP + FN)	False Positives (FP)	Positive Predictive TP/(TP + FP)	True Negatives (TN)	Specificity TN/(TN + FP)
24	16	24/40 (60%)	52	24/76 (32%)	148	148/200 (74%)

Sensitivity—true positives/total with behavior.
Specificity—true negatives/total without behavior.
Positive Predictive—-true positives/total positives.

TABLE 2. Impact of Depression (QIDS), Modified Sheehan Disability Scales Scores and Substance Abuse on the Likelihood of Suicidal Behavior if Patients Are ASQ Positive

	True Positives (TP)	False Negatives (FN)	Sensitivity TP/(TP + FN)	False Positives (FP)	Positive Predictive (TP/TP + FP)	True Negatives (TN)	Specificity TN/(TN + FP)
ASQ pos. and QIDS 18+	16	24	16/40 (40%)	41	16/57 (28%)	159	159/200 (80%)
ASQ+ and Modified Sheehan 36+	10	30	10/40 (25%)	12	10/22 (45%)	188	188/200 (94%)
ASQ+ and Substance Abuse	16	24	16/40 (40%)	20	16/36 (44%)	180	180/200 (90%)

QIDS indicates Quick Inventory of Depressive Symptomatology; ASQ, Affective States Questionnaire.

Of the 40 patients who went on to suicidal behavior, 24 had anxiety disorder (60%), compared with 79 out of 200 (40%) who did not go on to suicidal behavior, a statistically significant difference ($X^2 = 5.72$, $df = 1$, $p = 0.017$). Of 24 ASQ positive cases that went on to suicidal behavior, 16 were substance abusers (67%). Of the ASQ positive cases that did not go on to suicidal behavior, 20 of the 52 were substance abusers (38%), also a statistically significant difference ($X^2 = 5.24$, $df = 1$, $p = 0.022$). Substance abuse did not improve the likelihood of suicidal behavior if patients were ASQ positive but did improve specificity. When patients who were ASQ positive were also substance abusers, the effect was comparable to the Modified Sheehan in significantly reducing the number of false positive cases.

Incremental Validity of the ASQ

Could the predictive value of the ASQ result primarily from its association with other commonly assessed risk factors for suicide—current suicidal ideation, substance abuse, etc? To answer this question, it was necessary to determine the incremental validity of the ASQ as a predictor of suicidal behavior, over and above other commonly assessed risk factors. Table 3 displays results from the estimation of 2 logistic regression models. In the first, the strength of the association of the ASQ to a positive C-SSRS is estimated, net of the association of baseline suicidality (as measured by question 12 in the QIDS which deals with suicidal ideation). A positive ASQ remains a strong predictor of suicidal behavior in this model. It increases the odds of a positive C-SSRS by a factor of 2.7.

The second model in Table 3 adds sex, substance abuse, and level of depression (as measured by the sum of the remaining QIDS items) to the set of predictors. Although each of these is associated with a positive C-SSRS at follow-up, the independent association of ASQ is still very strong (odds ratio = 2.4). Thus, even in situations in which other important risk factors have been assessed, the ASQ offers substantial additional predictive value for the short-term prediction of suicidal behavior in high-risk populations.

TABLE 3. Incremental Predictive Validity of the ASQ: C-SSRS Regressed on ASQ With Other Risk Factors Controlled

	Model 1[a]		Model 2[b]	
	OR	95% *CI*	*OR*	95% *CI*
ASQ pos.	2.7	(1.3–5.8)	2.4	(1.1–5.4)
Suicidality item from QIDS	2.2	(1.5–3.3)	2.3	(1.5–3.5)
Sex			2.5	(0.9–6.9)
Substance Abuse			2.4	(1.1–5.1)
QIDS (minus suicidality item)			1.0	(0.9–1.1)

[a]Results of a logistic regression analysis in which a positive C-SSRS is regressed on ASQ positive and the QIDS suicidality item.

[b]Results after adding sex, substance abuse, and the QIDS (minus suicidality) to the prediction in Model 1.

ASQ indicates Affective States Questionnaire; QIDS, Quick Inventory of Depressive Symptomatology, *OR* indicates odds ratio; *CI*, confidence interval.

How Much Do the Individual Affects Contribute to Predicting Imminent Suicidal Behavior?

All of the affects except rage contributed significantly to selecting the patients who would go on to suicidal behavior. Intense anxiety, desperation, loneliness, hopelessness, and guilt best identified the ASQ positive cases that went on to suicidal behavior in 3 months. They were also the affects that had the lowest frequency of false negative cases, i.e., cases that went on to suicidal behavior despite the absence of the affects in intense form. Anxiety, loneliness, hopelessness, and guilt had the highest number of false positives. Desperation had among the lowest number of false positives and thus had the best overall predictive value with a *phi* coefficient of 0.38 (Table 4).

Suicide Attempts

There were 10 suicide attempts among all the patients seen in the project, including the pilot studies. An intense ASQ score was found in 8 of the 10. The number is too small to be of significance, but examination of the 2 patients who were not ASQ positive indicated that substance abuse problems, which both had, significantly worsened since they were originally tested. Although the project protocol did not include retesting with the ASQ at the 3-month interval, in 1 patient the QIDS depression score had gone from 14 to 27, and the Modified Sheehan scores, which rate how much emotional difficulties are interfering with the patient's ability to function, had gone from 24 to 40, the maximum possible on the 4 questions. The other patient's depression scores were unchanged but the patient's Modified Sheehan scores had gone from an original 21 to 40.

DISCUSSION

ASQ's Predictive Power

Our findings demonstrate that the ASQ can be a useful tool in the prediction of acute risk for suicide behavior. It achieved a level of sensitivity (60%) slightly better than Pokorny's while achieving a marked improvement in positive predictive power. This is notable given that Pokorny's sample was composed entirely of inpatients from all psychiatric wards of the hospital, including the alcoholism and drug abuse wards, and was highly selected for suicide risk through the inclusion of such factors as past suicide attempts. Eligibility requirements for our study, by contrast, allowed inclusion of psychopathology that was far more general, far less severe, and did not include an indicator for suicidality. In addition, Pokorny was tracking cases over a 4 to 6-year period, and our study was limited to behavior occurring within 3 months. Although the 68% of false

TABLE 4. Predictive Value of Individual Affects on Suicidal Behavior

N = 240	True Positive	True Negative	False Positive	False Negative	*Phi* Coefficient	*p*
Anxiety	26	118	82	14	0.18	0.005
Rage	10	163	37	30	0.06	0.34
Desperation	24	167	33	16	0.38	0.0001
Loneliness	20	140	60	20	0.16	0.014
Hopelessness	24	149	51	16	0.28	0.0001
Abandonment	13	167	33	27	0.15	0.019
Self-hatred	11	172	28	29	0.14	0.035
Guilt	23	145	55	17	0.24	0.0002
Humiliation	15	163	37	25	0.17	0.008

positives obtained by the ASQ is a significant improvement over the 97% of false positives obtained in the Pokorny study, it still does not meet the 50% standard he set; it may be acceptable, however, to have 68% false positives, given the extreme seriousness of the behavior and the short time period for which we were screening.

Pokorny's criterion for prediction is virtually achieved when the ASQ is combined with substance abuse or with high scores on the Modified Sheehan scale. The trade-off of this improvement with sensitivity is clear. Nonetheless, the 16 true positives who were both substance abusers and screened positive on the ASQ represent 40% of the cases that went on to suicidal behavior, a significant number. Furthermore, our positive predictive value may well have exceeded the 50% threshold if we had information about current substance abuse rather than merely a diagnosis of substance abuse. In our past work, an increased level of substance abuse among those with past substance abuse problems was frequently observed in the period immediately before their suicide attempts.

Researchers, primarily in Europe, have been looking at the frequency of a repeated episode of "nonfatal self harm," following an initial episode in which the subject was evaluated with the BHS. A meta-analysis of these studies (Macmillan et al. 2007) examined the BHS as a predictor of suicide and nonfatal self-harm (parasuicide) and found generally very high levels of sensitivity (pooled sensitivity = 0.80), but impractical levels of specificity (pooled specificity = 0.42), so that prediction was not feasible. Specificity was particularly poor for studies with a short follow-up period. One study of patients admitted to the hospital after an episode of self-harm (79% of the 66 patients had a history of 2 or more previous episodes of self-harm) did find that the BHS performed well as a short-term screen in this high-risk population (Sidley et al., 1999). If the ASQ comparably improves when applied to a similar population, then it would be an extremely accurate predictor of short-term risk for suicidal behavior, even in the absence of information of other risk factors such as substance abuse.

Affects

The ASQ is essentially a measure of uncontrollable intense affects. That desperation was the affect that contributed the most to the ASQ's predictive power was consistent with our past work. An explanation of the contradictory evidence as to whether hopelessness is a short- or long-term risk factor for suicide may lie in the fact that hopelessness often turns to desperation in the period immediately before a suicide (Hendin et al., 2007), and thus is a poor predictor of acute suicidal behavior in and of itself.

The affect of rage was involved in only 25% of the true positives, a finding not consistent with our earlier work. Nine of the patients who were screened could not be followed because they had been incarcerated for reasons we do not know. In 4 of the 9 their rage was intense. It is possible that rage was expressed in antisocial behavior. The patients in our earlier work were civilians involved in ongoing psychotherapy and were equally divided among men and women. The present sample of predominantly male veterans may be experiencing elevated rage as a symptom of PTSD (Hendin et al., 1991).

Limitations

Our sample was too small and contained too few high-risk cases to address our ultimate aim: to test the ASQ for its ability to predict acute risk for suicide attempts and suicide in high-risk populations and to see how much predictability the ASQ adds to the risk factors. A much larger sample of patients with a higher risk will be needed to make this possible. Since our study was time-limited in determining acute risk, we have no information as to which of our patients went on to attempted suicide or suicide after the 3 month period. Since suicidal behavior is one of the greatest risk factors for suicide, being able to identify and treat those most at acute risk for such behavior should enable us to decrease the number who go on to suicide.

The small number of suicide attempters was fortuitously helpful in indicating ways in which our procedures could be improved. The 2 of the 10 suicide attempters who did not test positive on the ASQ but went on to attempt suicide were substance abusers whose substance abuse had worsened considerably since they were tested first, a factor which likely contributed to the marked increase in the QIDS scores on one, and a virtual doubling of the Modified Sheehan scores of both, when they were seen after 3 months. There was reason to believe that neither patient had been at acute risk when tested but had become so subsequently. Monthly evaluations of the patient rather than once after 3 months would be helpful. In addition, it suggested that there would be value in having a quantitative measure of the severity of substance abuse comparable to what the QIDS gave us for depression and the Modified Sheehan for functional disability.

CONCLUSION

The difficulties in predicting acute risk for suicidal behavior and suicide present a challenge that needs to be met so that we can focus our treatment efforts accordingly. Recognizing the intense, overwhelming, intolerable emotional states that leave patients feeling out of control in a crisis period immediately preceding their suicidal behavior is critical in this process. The ASQ is demonstrating that identifying these emotional states can improve our ability to predict when an acute risk is present.

The ASQ should be of value to both clinicians and researchers in dealing with a variety of patient populations and in a variety of outpatient and inpatient settings. The Veterans Health Administration is currently confronted with a large number of Iraq war veterans who are depressed, have PTSD, may be substance abusers, and are deemed at risk for suicide. The ASQ should help in deciding which of these high-risk patients are most acutely at risk.

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