

Emotional Distress and Substance Abuse as Risk Factors for Suicide Attempts

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Background: Both depression and hopelessness have been found to be closely related to suicide risk among adolescents and adults. Substance abuse has also been found to play a role in the suicide process with adults, but it is still unclear how much substance abuse influences suicide in adolescents.

Method: The present study examined the relationship between substance abuse, emotional distress, and suicidal intent among 115 adolescent psychiatric inpatients who had attempted suicide.

Results: Measures of emotional distress, as well as the measures of substance abuse, were significantly intercorrelated. Correlations across domains (emotional distress versus substance abuse), however, varied by gender. Among adolescent females, both depression and hopelessness were significantly related to suicidal intent, whereas among adolescent males, only depression was related to suicidal intent. Also, alcohol abuse was significantly related to depression and hopelessness in adolescent males.

Conclusions: Hopelessness may not be as useful an indicator of suicide risk among adolescent males as it is with adolescent females. Intervention and prevention programs designed for adolescent females should identify and address feelings of depression and hopelessness. New intervention and prevention programs may need to be developed for adolescent males.

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Suicidal behaviour among adolescents has become an important concern in the United States (1). In a recent large-scale survey of high school students (2), 36% of adolescents reported experiencing suicidal ideation during the previous year, and 7% had made a suicide attempt in the previous year. Research needs to expand our understanding of suicide risk factors in order to develop effective treatment strategies and prevention programs.

Two factors that have been established as increasing the risk of suicide are depression and hopelessness. Depression may set the stage for suicidal ideation, with more than half of depressed adolescents reporting frequent thoughts of death by

suicide (3). Also, research has found that hopelessness and extreme pessimism about the future have a strong association with suicidal tendencies (4,5). Naturalistic follow-up studies have found that hopelessness is more closely related to death by suicide than is depression alone (6).

In addition to depression and hopelessness, alcohol consumption and alcohol dependence have been found to play important roles in suicidal behaviour (7). In a study of 913 adults with a primary diagnosis of alcoholism (8), 17% had previously attempted suicide. Furthermore, completed suicide is 120 times more prevalent among adult alcoholics than in the general population (9). Suicide is one of the more common means of violent death among adult alcoholics (10), with estimates suggesting that up to 18% of all alcoholics die by suicide (11). Both suicide and substance use may be seen as maladaptive attempts to escape from an intolerable situation (12).

Depression and substance abuse appear to be more lethal in combination than either factor is alone. Comorbid depression may play an important role in suicide among alcoholics (9). The majority of alcoholics who have died by suicide also had a comorbid mood disorder (13). In the general population, adults reporting depression with secondary alcohol abuse reported an increased risk of suicidal ideation or attempts when depressed (14). In a prospective follow-up study of

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1312 patients treated for alcohol abuse, Berglund (15) found higher rates of depressive symptoms in those patients who eventually died by suicide during the follow-up period.

Alcoholism may contribute to suicide risk even after controlling for depression. For example, among depressed patients, alcoholics report significantly higher suicidality than nonalcoholics (16). Furthermore, among adult suicide attempters, a diagnosis of alcoholism predicted eventual death by suicide (17). A recent study of adolescent girls (18), however, found that alcohol consumption did not increase the statistical ability to predict suicidal ideation beyond that obtained through information on depression severity and family problems.

Although few studies have examined the relationship between alcohol abuse and suicide among adolescents, the available evidence suggests that alcohol abuse may be particularly relevant to emotional distress and suicidal behaviour among the young (19). Among adolescents, the combination of substance abuse and mood disorder is strongly associated with risk of completed suicide (20). In a recent study of 1050 adolescents (21), suicide attempts were closely related to the comorbid presence of depression and alcohol or drug abuse. Likewise, the rate of alcohol abuse has been found to be significantly higher in young adults (under age 30 versus over 30) who committed suicide (22). Among young men (aged 18 to 20 years), high alcohol consumption was positively correlated with suicide risk (23). In one study of young adults who died by suicide (24), 12 of 58 individuals who completed suicide were diagnosed with alcohol dependence. In addition, female adolescents who consume moderate to large amounts of alcohol are more likely to have severe and recurrent depression (25). Alcohol abuse has been found to be related to the presence and severity of suicide attempts among adolescent psychiatric inpatients (26,27), with 15% to 33% of suicide completers having documented histories of substance abuse (28,29). Furthermore, a history of alcohol abuse is positively correlated with the number and lethality of suicidal acts (30). Suicide victims have been found more likely to have had major depression, comorbid substance abuse (20), and family history of depression and substance abuse (31).

Alcohol consumption at the time of the suicide attempt may be more important than the individual's long-term patterns of alcohol use (32). Alcohol intoxication is often observed immediately preceding both suicide attempts and suicide completions (33). Many adults who have died by suicide were reported to have talked about suicidal feelings only while drinking (13), and many adolescents who attempt suicide have been found to be intoxicated at the time of their attempt (34). The short-term effects of alcohol intoxication may prompt sudden, impulsive suicide attempts (35). Alcohol use may be related to an increased risk of suicidal behaviour because the alcohol reduces inhibitions, making patients more likely to act on impulsive suicidal feelings (36). Thus one way that alcohol use can increase the risk of suicidal behaviour is by lowering the person's inhibitions at the time of the attempt, making it more likely that a person who has been thinking about suicide will act on these ideas.

Substance abuse can increase suicide risk when alcohol is used as a maladaptive means of coping with depression. Furthermore, continued alcohol abuse is likely to induce or aggravate feelings of depression (37). The onset of depression precedes the alcohol abuse for the majority of adolescents diagnosed with both depression and substance abuse (38). Thus the individual is likely to have been depressed and possibly suicidal for some time. When it becomes obvious to the individual that the alcohol has not helped to solve life's problems and has failed to reduce the depression, the individual may resort to attempting suicide.

The abuse of drugs other than alcohol has also been related to increased risk of suicide attempts (39), especially among the younger age groups (40). The rates of attempted suicide among drug abusers are comparable to those seen in alcoholic populations (41). Alcoholics who are also depressed (42) or have attempted suicide (8,43) are more likely to report the abuse of other drugs in addition to alcohol. The relationship between suicide and nonalcoholic drugs is especially prominent among the younger suicide victims (44). In one study of 298 adolescent patients who abused drugs (predominantly marijuana, hashish, and alcohol), 67% of the patients reported suicidal ideation, and 30% admitted to at least one prior suicide attempt (45). Although substance misuse has been found to be an important predictor of adolescents and young adults who die by suicide (46), it can be difficult to separate the abuse of alcohol from other drugs (22,46). Alcohol continues to be the drug most widely used by adolescents (47).

Alcohol abuse plays a stronger role in suicide risk for males than females (11). The examination of gender differences in alcohol abuse may provide information about significant gender differences in suicidal behaviour. Gender differences play an important role in depression (48) and suicide (49). Adolescent females are more likely than males to attempt suicide, whereas adolescent males are more likely than females to die by suicide (49). Among depressed outpatients, men are more likely than women to meet criteria for comorbid substance abuse problems (50). While adolescent females may be more likely to admit to higher levels of depression, adolescent males may manifest their feelings of depression and loneliness through alcohol abuse.

Family, twin, and adoption studies all suggest that genetic factors play an important role in the etiology of alcohol abuse (51). Their role in alcohol use among adolescents is also important (52). Individuals who abuse alcohol are more likely than controls to have at least one parent or another family member who is an alcoholic (53). In addition, among individuals with a family history of alcoholism, the symptoms of alcohol dependence are more severe and typically begin earlier (51). The increased risk of alcohol abuse persists even when children of alcoholics are adopted away from their biological parents in infancy (54,55).

The evidence for the genetic transmission of alcohol abuse is stronger for men than women (51), at least for some forms of alcoholism (56). Among males, monozygotic twins have a higher concordance rate for alcohol abuse than do dizygotic twins (57,58). Age of onset may be an important factor in the

heritability of alcoholism. Symptoms of alcoholism tend to begin 8 years earlier for males than females (59,60). Genetic factors have a stronger impact on the development of early-onset alcohol abuse among males (57). In addition, genetic evidence suggests that alcoholism and depression are separate disorders (61,62). Early studies of alcoholic patients found higher rates of alcoholism in male relatives and higher rates of depression in female relatives (59,60).

The present study was designed to examine the role of emotional distress and substance abuse in adolescents who were hospitalized for psychiatric treatment following a suicide attempt. First, the study was designed to test the hypothesis that alcohol abuse would be associated with an increased risk of suicidal intent. Second, the results were examined to determine how alcohol abuse was related to specific dimensions of suicidal intent. It was expected that substance abuse would be related to higher seriousness of the attempt but to less planning and fewer precautions taken prior to the attempt. Third, it was expected that males and females would display different patterns of relationships between measures of alcohol abuse and emotional distress. Specifically, males were expected to report higher levels of alcohol use, with ratings of alcohol use correlating with depression severity. In contrast, it was expected that females would report higher levels of depression and that their depression scores would not strongly correlate with alcohol use.

Method

Subjects

A total of 115 adolescent psychiatric inpatients participated in the present study as part of an ongoing clinical research project (63,64). All subjects were currently receiving inpatient psychiatric treatment at the time of the study. All subjects had attempted suicide on at least one occasion. Patients ranged in age from 12 to 17 years old. The sample was composed of 33 males with a mean age (\pm standard deviation) of 15.30 years \pm 1.38 years and 82 females with a mean age of 15.20 years \pm 1.33 years. The majority (91%) of the subjects were white; the remaining 9% were African American. Although information was not available on the socioeconomic status of each patient, the hospital serves the suburban area surrounding a large midwestern city. Patients typically were members of middle-class families with insurance coverage to pay for their hospital stay. For 69 of the adolescents, the present suicide attempt was their only attempt. However, twenty-seven of the subjects had attempted suicide at least once before, and an additional 19 had attempted more than twice before the current attempt. The majority of patients ($n = 65$) had attempted suicide shortly before their current hospitalization, while 50 patients had attempted suicide some time previously. There were no significant differences between recent and past attempters on any of the dependent variables.

A psychiatric diagnosis was provided by the attending psychiatrist at the time each adolescent was discharged from the psychiatric hospital. All patients received at least one diagnosis according to DSM-III-R (65) or DSM-IV (66)

diagnostic criteria. Diagnoses were made after the psychiatrist had conducted several unstructured clinical interviews with the patient and relevant family members. All available information was used to derive the final discharge diagnosis. The attending psychiatrists were blind to the purposes of the present study.

Measures

The Suicidal Intent Scale (SIS) (67) attempts to quantify the severity of a previous suicide attempt based on information gathered through a semistructured clinical interview with the person who has previously attempted suicide. The SIS includes 20 items designed to quantify the lethality of a previous suicide attempt. Items are scored 0, 1, or 2, depending on the presumed lethality of the act. Items assess risk factors such as precautions taken to protect against discovery, final acts done in anticipation of one's own death, the degree of planning prior to the attempt, and overt communication of the plans before attempting. Only the first 15 items are entered into the SIS total score, producing a range of potential total scores from 0 to 30, with higher scores reflecting more lethal suicidal behaviour. Reliability estimates of the SIS suggest that the scale has good internal consistency ($\alpha = 0.79$) with adolescent subjects (68). In addition to the total score, the SIS was scored for 3 subscales found useful in previous research (17): seriousness of attempt, precautions taken, and degree of planning. A prospective follow-up study of 161 alcohol-abusing patients (35) has found that the taking of precautions to prevent intervention (measured by the SIS) was highly predictive of individuals who went on to die by suicide. Although developed for use with adults, the SIS seems appropriate for use with adolescents (69).

The Children's Depression Inventory (CDI) is a self-report measure designed to assess depressive symptomatology (70). The scale contains 27 items scored on a 3-point scale of ascending depression severity. The CDI has good internal consistency (71) and test-retest reliability (72). The CDI adequately discriminated between adolescent control subjects and patient populations (70,71). In addition, the CDI is correlated with other measures of adolescent depression (73).

The Hopelessness Scale for Children (HSC) assesses adolescent views about the future (74). The scale consists of 17 true-or-false items. Higher scores indicate more negative expectations about the future and greater suicide risk than lower scores. The HSC has demonstrated good internal consistency ($\alpha = 0.97$) and 6-week test-retest reliability ($r = 0.52$) (75). It has discriminated between samples of adolescent suicide attempters and high school control subjects (76). The HSC is also related to adolescent depression and low self-esteem (75).

Another measure, the Michigan Alcohol Screening Test (MAST) (77), includes 25 questions designed to assess drinking behaviour and the problems associated with excessive alcohol use (for example, blackout periods and conflict with family). The MAST has demonstrated adequate evidence of validity for use with adolescent samples (78). The present study used the 14-item short form of this test (79). The MAST

Table 1. Comparisons of male and female adolescent suicide attempters on demographic variables and self-report measures

Variable	Males (n = 33)	Females (n = 82)	Significance test
Age ^a (years)	15.30 ± 1.38	15.20 ± 1.33	<i>t</i> (113) = 0.39, ns
Race			
White	90.0%	91.1%	$\chi^2(1) = 0.04$, ns
African American	10.0%	8.9%	
Psychiatric diagnosis			
Depression	61.3%	76.2%	$\chi^2(1) = 2.25$, ns
Substance abuse	29.0%	19.0%	$\chi^2(1) = 1.19$, ns
Suicide attempts ^b			
Zero	63.6%	58.5%	$\chi^2(2) = 0.26$, ns
One or two	21.2%	24.4%	
Three or more	15.2%	17.1%	
SIS ^a			
Total score	10.76 ± 6.62	10.01 ± 6.05	<i>t</i> (113) = 0.58, ns
Seriousness subscale	5.06 ± 3.73	4.30 ± 3.39	<i>t</i> (113) = 1.05, ns
Precautions subscale	2.18 ± 1.65	2.21 ± 1.61	<i>t</i> (113) = 0.08, ns
Degree of planning subscale	1.36 ± 1.91	1.66 ± 2.14	<i>t</i> (113) = 0.69, ns
CDI ^a	17.59 ± 10.57	15.25 ± 10.96	<i>t</i> (108) = 1.00, ns
HSC ^a	5.03 ± 4.87	4.79 ± 4.66	<i>t</i> (108) = 0.24, ns
MAST ^a			
Alcohol abuse	2.59 ± 3.11	1.83 ± 2.87	<i>t</i> (108) = 1.23, ns
Drug abuse	2.81 ± 3.41	1.29 ± 2.55	
RAPI ^a	17.59 ± 25.55	9.23 ± 18.15	<i>t</i> (106) = 1.89, <i>P</i> = 0.06

^aData are presented as mean ± standard deviation.

^bNumber of attempts before present attempt.

was correlated with other self-report measures of alcohol use and correctly identified adults who met DSM diagnostic criteria for alcohol disorders (80). The present study included modified MAST items designed to assess information about the abuse of alcohol as well as other recreational substances (MAST drug abuse scale).

The final instrument, Rutgers Alcohol Problem Index (RAPI) (81), consists of 23 items assessing adolescent alcohol use. Each item is endorsed on a 5-point scale progressing from 1 (never) to 5 (always). High scores indicate more alcohol-related problems. Reliability estimates suggest the RAPI has good internal consistency ($\alpha = 0.92$) and moderate 3-year test-retest reliability (81).

Results

Pearson correlations were computed to examine the relationships between suicidal intent and measures of emotional distress and substance abuse across all subjects. Results revealed that suicidal intent was significantly correlated with

depression ($r[111] = 0.45$, $P < 0.001$) and hopelessness ($r[111] = 0.35$, $P < 0.001$). It was not, however, significantly related to measures of alcohol abuse (MAST $r[111] = -0.02$; RAPI $r[109] = 0.14$) or drug abuse ($r[111] = 0.07$). Furthermore, none of the subscales of suicidal intent were significantly related to alcohol or drug abuse. The seriousness of the attempt, however, was related to depression severity ($r[111] = 0.46$, $P < 0.001$) and level of hopelessness ($r[111] = 0.40$, $P < 0.001$).

A series of *t* tests and chi-square analyses examined possible gender differences on the scales (Table 1). There were no differences between males and females in terms of SIS total score ($t[113] = 0.58$). On individual items from the SIS, males were significantly more likely than females to have attempted suicide by a means they believed would certainly cause their death ($\chi^2[2] = 10.53$, $P < 0.01$). No gender differences were observed on the CDI total score ($t[108] = 1.00$), the HSC ($t[108] = 0.24$), or MAST alcohol abuse ($t[108] = 1.23$). Males scored higher than females, however, on the MAST drug abuse scale ($t[108] = 2.56$, $P < 0.01$), and there was a nonsignificant trend on the RAPI ($t[106] = 1.89$, $P = 0.06$). In the present sample, only 9 of the 115 suicide attempters reported consuming alcohol at the time of their attempt, and only 5 admitted to being intoxicated or high at the time of their attempt. On the diagnoses given by the attending psychiatrist, males and females did not differ in the likelihood of having been diagnosed with major depression, ($\chi^2[1] = 2.25$) or substance abuse ($\chi^2[1] = 1.19$).

Correlations between scales were calculated separately for male versus female patients (Table 2). In both males and females, the correlational patterns supported the concurrent validity of the measures. The measures of emotional distress (that is, SIS, CDI, and HSC) were significantly intercorrelated, and the measures of substance abuse (MAST and RAPI) were significantly intercorrelated. Correlations across domains (emotional distress versus substance abuse), however, varied with gender. Among adolescent males, suicidal intent was significantly related to depression severity ($r[29] = 0.55$, $P < 0.001$) but not to hopelessness ($r[29] = 0.21$) or alcohol abuse ($r[29] = 0.30$). In contrast, among the female patients, suicidal intent was significantly related to both depression ($r[81] = 0.40$, $P < 0.001$) and hopelessness ($r[81] = 0.41$, $P < 0.001$) but not alcohol abuse. Thus hopelessness may not be as useful an indicator of suicide risk among adolescent males as it is with adolescent females. Further, alcohol abuse among the male patients was significantly related to depression severity ($r[28] = 0.58$, $P < 0.001$) and hopelessness ($r[28] = 0.57$, $P < 0.001$). None of these relationships were found with the female patients. Severity of suicidal intent was not significantly correlated with alcohol or substance abuse for male or female adolescent suicide attempters.

On the subscales of suicidal intent, depression severity was related to the SIS seriousness of attempt measure, with higher levels of depression related to more serious suicide attempts. This pattern was found both with adolescent males ($r[29] = 0.58$, $P < 0.01$) and adolescent females ($r[81] = 0.40$, $P < 0.01$). Among females, increased levels of hopelessness were

Table 2. Pearson correlations between measures of suicide risk and substance abuse computed separately for male and female adolescent psychiatric inpatients

	SIS	CDI	HSC	MAST-alcohol	MAST-drug	RAPI
SIS		0.55 ^a	0.21	0.09	0.16	0.30
CDI	0.40 ^a		0.74 ^a	0.41 ^b	0.23	0.58 ^a
HSC	0.41 ^a	0.78 ^a		0.31 ^c	0.25	0.57 ^a
MAST-alcohol	-0.08	0.05	-0.10		0.52 ^a	0.69 ^a
MAST-drug	0.00	0.15	-0.01	0.82 ^a		0.78 ^a
RAPI	0.04	0.17	0.09	0.70 ^a	0.75 ^a	

Correlations above diagonal are for adolescent male psychiatric inpatients (n = 33); correlations below diagonal are for adolescent female psychiatric inpatients (n = 82).

^a*P* < 0.001.

^b*P* < 0.01.

^c*P* < 0.05.

also related to increased seriousness of attempt ($r[81] = 0.44$, $P < 0.001$). Finally, seriousness of intent was related to RAPI scores of alcohol abuse for males ($r[29] = 0.36$, $P < 0.05$) but not for females ($r[79] = 0.03$).

A hierarchical multiple regression analysis was used to examine the unique variance in suicidal intent accounted for by substance use. Gender was entered first into the analysis in our attempt to predict total scores from the SIS: it accounted for only 1% of variance in SIS scores. Depression and hopelessness were entered second and accounted for 19% of the variance ($r^2[3,98] = 0.187$, $P < 0.0001$). At the third step, scores from the MAST and RAPI were entered in stepwise fashion. No significant variance was added to the model from the drug and alcohol scores.

Discussion

Adolescent females were found to display the expected pattern of relationships, with depression, hopelessness, and suicidal intent all significantly intercorrelated. Among adolescent males, however, neither alcohol abuse nor hopelessness was significantly related to suicidal intent. Instead, alcohol abuse among males was significantly related to depression and hopelessness. In one study of 105 adults receiving outpatient treatment for alcohol abuse (82), hopelessness and depression were closely related ($r = 0.73$), yet hopelessness was more closely related to the level of suicidal ideation expressed by patients. Hopelessness is often a key factor in suicide risk for both alcoholic and nonalcoholic adults (36). Although alcohol abuse was not directly related to suicide risk in the present study, alcohol may exacerbate feelings of depression and hopelessness among adolescent males. Prevention programs, therefore, may need to discuss the effect of alcohol abuse on emotional distress among males.

The present findings shed light on the relationship between alcohol abuse and suicide risk. Important gender differences exist during adolescence that seem to play a role in the relationships between substance abuse and emotional distress. Among adolescent females, suicide risk was closely related to the severity of depression and hopelessness. Among adolescent males, suicide risk was associated with depression but not hopelessness or substance use. Both depression and hopelessness, however, were associated with alcohol use

among males but not among females. These results suggest that for males, alcohol use may be related to suicide through its relationship with depression and hopelessness.

The observed sex differences may be influenced by the age of onset of alcohol abuse. Males have been found to begin abusing alcohol and to develop symptoms of alcohol abuse several years earlier than have females (7). Depressed adolescent females who also abuse alcohol or drugs, however, tend to experience depressive episodes that last longer and begin earlier than do females who do not abuse substances (83). Substance abuse by adults may be more severe or more chronic than abuse by adolescents and therefore may be more likely to have a broad influence on the individual's lifestyle. If alcohol does have a significant effect on suicidal behaviour, it may take years of abuse for the substances to wreak havoc on the individual's physical health, family life, friendships, financial security, and employment status. It may be that only after alcohol abuse demonstrates a negative impact on the individual's psychosocial functioning will it become apparent how alcohol abuse affects suicide. Among adults, depression often occurs as a secondary consequence of years of substance abuse. In a study of 218 adult alcoholics (84), patients who had started abusing alcohol during adolescence were at increased risk of depression and suicide attempts as compared with patients reporting adult-onset alcohol abuse. During adolescence, the long-term consequences of abuse have not yet developed, but the process may be underway. The physical and social impairment caused by alcohol abuse may become prominent only after years of abuse.

The relationship between suicide and substance abuse is more complex than represented in the findings of the present study. For example, alcohol consumption has been associated with clinician ratings of suicide severity but not with self-reported suicidal ideation (18). Furthermore, both alcohol abuse and suicide risk can influence and can be influenced by biological, psychological, and social factors. For example, family history of depression, suicide, or substance abuse may predispose a patient to developing these problems. Likewise, family conflict or interpersonal loss may increase the patient's emotional distress and risk of suicide. Future research may be able to expand on the present findings and include an assessment of social loss, a variable found important in adult

alcoholics who commit suicide (85). Clinicians should evaluate suicide risk with patients who abuse substances when significant life changes occur (86).

The present findings are limited by several methodological aspects of the study. The subjects were predominantly white, middle-class females assessed during their brief stay at a private, suburban psychiatric hospital. These factors may limit the generalizability of the findings to other populations and other settings. Also, subjects were assessed using self-report measures collected at one point in time. Self-report biases could have influenced the information on emotional distress or substance abuse reported by subjects. Future research may be able to examine substance abuse and suicide risk using other types of measures (for example, informant interviews) and other methodological designs (for example, longitudinal studies).

The present findings have implications for the prevention of suicide among adolescents. Previous research on the prevention of adolescent suicide (87,88) has found that traditional prevention programs are beneficial for females but not for males. Professionals may need to develop suicide prevention programs for adolescent males that address the effect of alcohol abuse on emotional distress, particularly depression and hopelessness. Early treatment of alcohol abuse may be important when working with adolescent males, but the identification and treatment of depression is an important strategy in suicide prevention, regardless of substance abuse issues (13). When combined with substance abuse, even mild depression may substantially increase the risk of suicidal behaviour (89). The early identification and treatment of minor depressive reactions may reduce the risk of alcohol use as a maladaptive coping method for managing emotional distress (12).

Clinical Implications

- Depression severity is significantly correlated with the lethality of suicide attempts.
- Depressed adolescents should be evaluated for suicide risk.

Limitations

- These findings are based on self-report measures collected during a brief hospital stay.
- More research is needed to include multimethod assessments and longitudinal designs.

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Résumé

Toile de fond : On a constaté que la dépression et le désespoir sont étroitement liés au risque de suicide des adolescents et des adultes. La toxicomanie joue également un rôle dans le processus suicidaire chez les adultes, mais on ne sait pas encore à quel point la toxicomanie peut influencer sur le suicide des adolescents.

Méthode : La présente étude porte sur la relation entre la toxicomanie, la détresse psychologique et l'intention suicidaire chez 115 adolescents et adolescentes hospitalisés en psychiatrie qui ont tenté de se suicider.

Résultats : Les mesures de la détresse psychologique, de même que les mesures de la toxicomanie, présentaient une intercorrélation significative. Les corrélations entre les domaines (détresse psychologique par rapport à la toxicomanie) variaient toutefois selon le sexe. Chez les adolescentes, la dépression et le désespoir étaient fortement liés à l'intention suicidaire, alors que chez les adolescents, seule la dépression l'était. De plus, l'alcoolisme était fortement lié à la dépression et au désespoir des adolescents.

Conclusions : Le désespoir n'est peut-être pas un indicateur du risque de suicide aussi utile chez les adolescents que chez les adolescentes. Les programmes d'intervention et de prévention conçus pour les adolescentes permettent de repérer et de corriger les sentiments de dépression et de désespoir. Il faudra peut-être élaborer de nouveaux programmes d'intervention et de prévention destinés aux adolescents de sexe masculin.