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Chapter 5

Coping Strategies Associated With Suicidal Behaviour in Adolescent Inpatients With Borderline Personality Disorder

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Objectives: To compare the coping strategies of adolescents with borderline personality disorder (BPD) to the coping strategies of adolescents without BPD, and to explore the association of coping with suicidal ideation and attempts among adolescents with BPD.

Method: Adolescent inpatients (*n* = 167) aged 13 to 17 years were admitted after suicide attempts and evaluated within 10 days, using the abbreviated version of the Diagnostic Interview for Borderlines–Revised, the Schedule for Affective Disorders and Schizophrenia for School-Age Children–Present and Lifetime Version supported by a team consensus best estimate method for the primary diagnosis, the Adolescent Coping Scale, and the Columbia-Suicide Severity Rating Scale.

Results: Firstly, compared with adolescents without BPD, adolescents with BPD relied more on nonproductive coping strategies, mostly avoidant strategies, and less on productive coping strategies. Secondly, coping appeared as a factor associated with suicidal ideation in adolescents with BPD. While while controlling for age, sex, and depression, multivariate analyses showed a significant positive association between the coping strategy to focusing on solving the problem and suicidal ideation.

Conclusion: The use of avoidant strategies by adolescents with BPD could be viewed as attempts to increase emotional regulation. Problem-solving strategies in the immediate

aftermath of a suicide attempt may prevent adolescents with BPD from overcoming a crisis and may increase suicidal ideation.

Stratégies de coping associées au conduites suicidaire chez des adolescents hospitalisés avec un trouble de personnalité limite

Objectif : L'objectif principal est de comparer les stratégies d'adaptation d'adolescents ayant un trouble de personnalité limite (TPL) avec celles d'adolescents sans TPL. L'objectif secondaire est d'étudier la relation entre adaptation et idéation et tentatives de suicide chez des adolescents ayant un TPL.

Méthode : Des adolescents (*n* = 167) âgés de 13 à 17 ans ont été hospitalisés après une tentative de suicide et évalués dans les 10 jours selon la version abrégée du *Diagnostic Interview for Borderlines revised*, le *Kiddie-Schedule for Affective Disorders and Schizophrenia Present and Lifetime version* soutenu par la méthode de la meilleure estimation consensuelle de l'équipe pour le diagnostic principal, l'*Adolescent Coping Scale*, et la *Columbia-Suicide Severity Rating Scale*.

Résultats : Premièrement, en comparaison des adolescents sans TPL, les adolescents ayant un TPL avaient davantage recours à des stratégies d'adaptation non productives, principalement des stratégies d'évitement, et avaient moins recours à des stratégies d'adaptation productives. Deuxièmement, l'adaptation était un facteur associé aux idéations suicidaires chez les adolescents ayant un TPL. Après contrôle pour l'âge, le sexe et la dépression, l'analyse multivariée montrait une association significativement positive entre la stratégie « se centrer sur la résolution du problème » et la présence d'idéation suicidaire.

Conclusion : Le recours à des stratégies d'évitement par les adolescents ayant un TPL pourrait être un moyen d'augmenter la régulation émotionnelle. L'utilisation de stratégies centrées sur la résolution du problème au décours immédiat de la tentative de suicide peut empêcher les adolescents souffrant du TPL de surmonter une crise et peut accroître l'idéation suicidaire.

Coping strategies were first coined by Lazarus[1] and were defined as:

> constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person.[2, p 141]

Folkman et al[2] described a dichotomous model based on 2 coping styles: problem- and emotion-focused coping. Problem-focused coping strategies directly address the stressful situation whereas emotion-focused coping strategies attempt to regulate emotional states induced by the situation.

The pioneering work of Lazarus[1] and Folkman et al[2] was subsequently applied to adolescence regarding the developmental challenges pertaining to this age group. In contrast with adults, sex differences in the use of emotion-focused coping strategies were observed in adolescents.[3] A consistent finding across all adolescent studies has been that females more directly address stressful situations and seek more social support, compared with males.[3,4] Seiffge-Krenke and Klessinger[5] delineated a range of avoidant-coping strategies, which presented with sex differences. In a community sample, they found that girls less often used avoidant-coping strategies in school-related stressful situations. Certain other person-related characteristics, such as depression, have also been shown to influence coping strategies. In a community study with adolescents, Labelle et al[6] showed that depression and sex influenced coping strategies. Avoidant-coping strategies appeared more strongly associated with suicidal ideation in boys, compared with girls. The association was moderated by depression as assessed with the BDI-II, but still remained significant.

In another application of the Folkman and Lazarus' model, Frydenberg and Lewis[3] extensively studied coping strategies in Australian youth. Collecting narratives on actual ways of coping among adolescents, they regrouped coping strategies in 3 styles: reference to others, productive coping, and nonproductive coping, the latter including avoidant strategies. They developed a naturalistic instrument tackling the ways adolescents cope with stress, the ACS, and conducted a step-by-step validation study in a community sample.[7]

BPD is the greatest source of suicidal behaviours in adolescents.[8,9] In our study, we use the Classification Algorithm for Suicide Assessment terminology to define suicidal ideation, suicidal behaviour, and suicide, as recommended for adolescents by a recent consensus conference.[10,11]

During adolescence, BPD affects 11% of outpatients,[12] 53% of inpatients,[13] and 3% of adolescents in a community sample.[14] Some psychiatrists are still reluctant to diagnose BPD in youth, sharing the common belief that personality disorders only exist in adults. However, DSM-5 clearly states that BPD's onset can be traced back to adolescence.[15] Structured interviews and self-report questionnaires can reliably identify adolescents with BPD symptoms deviating strongly from typical adolescence.[8,16,17] Longitudinal studies have shown that BPD is relatively stable during

adolescence, with a moderate decline onwards.[8,12,18] BPD symptoms persist into adulthood for a significant portion of adolescents,[8] leading to less favourable health and social evolution.[19]

In adolescents considering suicide, BPD seems to be an independent risk factor for subsequent suicidal behaviour at 6-month follow-up (OR 2.4; $P = 0.052$).[9] Moreover, adolescents with BPD are likely to face an increased suicidal risk when they have psychiatric comorbidities (major depressive episode or SUD),[16] or when they are confronted with a negative life event.[7] Adolescents with BPD have to cope with particularly stressful family and social situations that increase their suicidal risk. However, little is known about their coping strategies and consequently how to efficiently address their coping impairments.

The approach of predicting suicidal behaviour, taking into account risk factors but also protective factors, was proposed by Breton and al[20] for assessing and treating adolescents with suicidal behaviours. This vulnerability–resilience stress model, based on principles of developmental psychopathology in which protective factors are considered, is presented in a companion paper.[21] The results of studies[22–26] regarding adolescents considering suicide in community samples converge toward the same conclusion: the use of productive coping reduces the suicidal risk, or at least mitigates the causal link between a risk factor (such as depression) and suicidal behaviours.[27] Conversely, the use of nonproductive coping strategies, including avoidant-coping strategies, increases the suicidal risk in clinical samples,[28,29] as well as in community samples.[30] To our knowledge, there is no available study on coping among adolescents with BPD admitted in an inpatient unit following a suicide attempt. In an adolescent community sample, Gardner et al[31] identified a strong positive correlation between BPD and nonproductive avoidant coping. These results support the relevance of exploring the link between coping strategies and suicidal behaviours among adolescents with BPD. However, as previously mentioned, one should take into account the likelihood of a contribution of depression and sex when exploring the relation between BPD and coping. In clinical settings, BPD is more often diagnosed in female adolescents than in males, even if no sex differences have been found in prevalence in community samples.[8] In addition, depressive disorders are overrepresented in adolescents with BPD admitted in psychiatry departments.[32]

Our study sought to compare adolescents with BPD to adolescents without BPD regarding their suicidal behaviour and coping strategies profiles. The secondary objective is to explore the association of coping strategies with suicidal ideation and the number of suicide attempts among adolescents with BPD.

Clinical Implications

- Intervention programs targeting coping strategies to increase emotional regulation should be included in prevention and treatment plans for adolescents with BPD considering suicide.
- In inpatient adolescents with BPD considering suicide, developing problem-focused productive strategies should not be the priority in the immediate aftermath of the suicide attempt.

Limitations

- Our study did not provide information on the long-term consequences of the use of nonproductive coping strategies, as it was not a prospective study.
- The sample was predominantly female and results could not be generalized to the whole spectrum of adolescents with BPD considering suicide.

Abbreviations

ACS	Adolescent Coping Scale
Ab-DIB	abbreviated version of the Diagnostic Interview for Borderlines–Revised
BDI	Beck Depression Inventory
BPD	borderline personality disorder
CIS	Columbia Impairment Scale
C-SSRS	Columbia-Suicide Severity Rating Scale
DIB-R	Diagnostic Interview for Borderlines–Revised
DSM	Diagnostic and Statistical Manual of Mental Disorders
ICC	intraclass correlation
K-SADS-PL	Schedule for Affective Disorders and Schizophrenia for School-Age Children–Present and Lifetime Version
MDD	major depressive disorder
ODD	oppositional defiant disorder
SUD	substance use disorder

Method

Participants

Our study was the first time assessment of an ongoing prospective multisite study on follow-up interventions for adolescent who have attempted suicide. The protocol received ethical approval from the regional research ethics board and was conducted in 5 inpatient adolescent medicine units within general hospitals (Rouen, Amiens, Compiègne, Creil, and Meaux) in France. Participants were recruited in the immediate aftermath of a suicide attempt that led to inpatient admission. The units all had the same intervention procedures at the hospitalization phase, in agreement with the recommendations of the French High Authority on Healthcare.[33] Short-term inpatient admission was mandatory after an emergency department visit for a suicide attempt. Each patient was assessed and followed by a pediatrician and a child psychiatrist.

From January 2011 to July 2012, 219 adolescents were eligible following their admission after a suicide attempt. The exclusion criteria included inability to get an informed and valid consent (intellectual disability or current psychotic episode), home address outside the selected hospitals' catchment areas, and absence of medical insurance coverage.

Patients (n = 167) between the ages of 13 and 17 years (19% boys and 81% girls) were included. Fifty-two adolescents did not participate for the following reasons: adolescent's refusal to participate (n = 37), parents' refusal to participate (n = 9), consent withdrawn during hospitalization (n = 3), and unauthorized leave (n = 3). Sixty-two per cent (n = 103) presented with a BPD, 32% presented with a MDD, 26% presented with an adjustment disorder with depressed mood, 29% presented with an anxious disorder, 1% presented with a psychotic disorder, 1% presented with anorexia nervosa, and 7% presented with substance abuse. The sociodemographic characteristics of the sample are presented in a companion paper on coping skills among adolescent suicide attempters with depressive disorders.[34]

Instruments

The interviewer-administered adolescent version[35,36] of the K-SADS-PL[37] is a semi-structured diagnostic interview for most of the Axis I DSM-IV-R diagnoses. The team consensus best-estimate method[38] was used to determine the primary diagnosis among diagnoses yielded by the K-SADS-PL.

The Ab-DIB is a DIB-R–derived self-report for adolescents covering the impulsiveness, as well as the effect and cognitive components of the borderline construct.[39,40] Its administration takes 10 minutes. The Ab-DIB was tested on 139 suicidal adolescents for reliability and concurrent validity against the DIB-R and the CIS.[41] Internal consistencies and test–retest ICC ranged from 0.80 to 0.86 and 0.77 to 0.95, respectively. Receiver operating characteristic analysis yielded an area under the curve of 0.87 ($P < 0.001$). Sensitivity was 0.88 and specificity ranged from 0.82 to 0.73 depending on the age range. Correlation of the Ab-DIB's continuous score with the CIS was 0.42 ($P < 0.001$).

The French version[42] of the BDI-II[43] is a commonly-used self-report for adolescents evaluating the severity of depressive symptoms. The instrument encompasses 21 items and scoring is carried out on a 4-point Likert scale. Scores range from 0 to 63. Its administration lasts 5 minutes. The psychometric properties of the French version of the BDI-II are detailed in a companion paper.[44]

The clinician-administered C-SSRS[45] assesses the severity of suicidal ideation and suicide attempts based on several ordinal items. In keeping with the work of Posner et al,[46] suicidality refers to active suicidal ideation (thinking of ending one's life), passive ideation, and suicidal behaviours. Suicidal behaviours include suicide attempts and completed suicides, as well as any preparatory act with a view to attempting suicide. The definition of a suicide attempt points to the suicidal intentionality behind the self-aggressive acting out, contrary to nonsuicidal self-injuries. Administration of this scale takes about 10 minutes. The C-SSRS' psychometric qualities are good (sensitivity: 100%; specificity: 99.4%; internal consistency [Cronbach alpha]: 0.73; convergent validity with several other instruments varies from 0.34 to 0.69, $P < 0.001$).

The self-administered ACS[47] is a self-report instrument for adolescents with a Likert scale 1 to 5 response for each item. The ACS includes 79 items (and 1 open question) gathered in 18 coping strategies, each strategy includes 3 to 5 items. Strategies are split into 3 coping styles: productive, nonproductive, and reference to others, depending on whether the subject approaches the problem or avoids it with reference to others or not (examples provided below). The productive style consists of strategies, such as to focus on solving the problem, to work hard to achieve, to focus on the positive, and to do physical recreation. The nonproductive style consists of strategies, such as to not cope, to worry, to use violent means to reduce tension, to self-blame, to ignore the problem, and to keep to self. The reference to others style includes strategies, such as to seek social support, to invest in close friends, and to seek professional help. The ACS' psychometric properties are detailed in a companion paper.[44]

Procedure

Our study received ethical approval from the regional Health Research Ethics Board. Written consents were obtained from the adolescent and his or her parents after providing them with written information. Within a maximum of 10 days following the suicide attempt, a semi-structured interview (K-SADS-PL) was conducted by a senior clinician or a previously trained resident in psychiatry with the adolescent as the informant. Participants then answered all self-reports, including the standardized sociodemographic questionnaire, Ab-DIB, ACS, and BDI-II. Within the same 10-day period, the clinician completed the C-SSRS to assess suicidal ideation and behaviour and documented the presence of impulse phobia, which is the fear of committing suicidal gestures associated with active suicidal ideation. A good interrater agreement for this item was informally established prior to the study. Participants were included in the BPD group if the Ab-DIB total score was above the clinical threshold and all available data confirmed the diagnosis according to the consensus best estimate procedure.[38]

Statistical Analyses

A statistical analysis was performed using the R software, version 2.12.[48] A P value of greater than 0.05 was considered significant, and all tests were 2-tailed.

Sociodemographic and clinical characteristics of the 2 groups of adolescents considering suicide, with and without BPD, were compared using chi-square and Student t tests. To explore coping strategies in suicidal adolescents with and without BPD, a comparative analysis using Student t test was conducted.

As a second step, univariate and multivariate analyses were conducted in the BPD group only. To explore the relation between coping and suicidal ideation and behaviour on the one hand, and suicide attempts on the other, univariate analyses (Spearman correlations) were carried out in the BPD group. In addition, a multinomial logistic regression was

Table 1 Sociodemographic and clinical characteristics among BPD and non-BPD adolescents

Characteristic	BPD *n* = 103	Non-BPD *n* = 64	*P*
Age, years, mean (SD)	14.6 (1.4)	15.1 (1.4)	0.05
Sex, female, %	81	79	ns
Number of siblings, mean (SD)	2.5 (1.1)	2.6 (1.4)	ns
Family structure, %			
Living with 1 or 2 biological parent(s)	93	94	ns
Living in a shelter or in a foster family	7	6.50	ns
History of special class services	14	9	ns
Passive ideation (C-SSRS), %	26	5	<0.001
Active ideation (C-SSRS), %	59	40	<0.001
Suicide attempts frequency (C-SSRS), mean (SD)	1.7 (1.6)	1.1 (0.3)	<0.001
Plan (C-SSRS), %	38	15	<0.001
Verbal threats (C-SSRS), %	45	22	0.01
Non suicidal self-injuries (C-SSRS), %	58	36	0.01
Impulse phobia, %	22	5	<0.001
Depression (BDI), mean (SD)	28.6 (12.2)	14.1 (9.2)	<0.001
Psychiatric comorbidities (number of K-SADS diagnoses), mean (SD)	1.6 (1.4)	1.1 (1)	0.05
Major depressive disorder (K-SADS), %	32	25	ns
Adjustment disorder with depressed mood (K-SADS), %	21	27	ns
Oppositional defiant disorder (K-SADS), %	15	2	0.01
Substance abuse (current episode) (K-SADS), %	10	4	ns

BDI = Beck Depression Inventory; BPD = borderline personality disorder; C-SSRS = Columbia-Suicide Severity Rating Scale; K-SADS = Schedule for Affective Disorders and Schizophrenia for School-Age Children; ns = not significant

carried out with significant coping strategies in univariate analyses as independent variables while controlling for age, sex, and depression as evaluated by the BDI-II, and suicidal ideation as a dependent variable. Suicidal ideation was an ordinal variable consisting of 3 ordered categories (no ideation, passive ideation, and active ideation) based on the C-SSRS's responses. Considering results from the univariate analysis, no multivariate analysis was conducted for suicide attempts.

Results

Clinical and Coping Characteristics

A comparison of sociodemographic characteristics between the 2 groups (BPD and non-BPD) is presented in Table 1. Only the mean age at the time of admission differed significantly between both groups: adolescents with BPD were 6 months younger (mean 14.6 [SD1.4], compared with mean 15.1 [SD 1.4], $P < 0.05$). There was no other significant difference between the 2 groups for sex, number of siblings, family structure, or special schooling.

Clinical characteristics of both groups for suicidal behaviours based on the C-SSRS and psychiatric comorbidity (K-SADS-PL), are presented in Table 1. Adolescents with BPD displayed a significantly higher proportion of passive and active ideation, suicidal plans, and impulse phobia in comparison with adolescents without BPD ($P < 0.001$). The same difference is observed for the mean number of suicide attempts. Methods for attempting suicide included drug overdose (85%), wrist cutting (7%), hanging (5%), and jumping from a window (1%). Adolescents with BPD presented with a higher proportion of nonsuicidal self-injuries ($P < 0.01$). Adolescents with BPD displayed a significantly higher score of depressive symptoms on the BDI-II in comparison with adolescents without BPD ($P < 0.001$). Finally, while adolescents with BPD presented a higher total number of diagnoses according to the K-SADS-PL, only ODD was diagnosed in a significantly higher proportion among adolescents with BPD. No significant difference was found for MDD and adjustment disorder with depressed mood, or for substance abuse according to the KSADS-PL.

Comparisons between the BPD group and the non-BPD group for each coping strategy and style are presented in Table 2. Adolescents with BPD relied less on productive coping (in particular the strategies to work hard to achieve and to do physical recreation). Conversely, they relied significantly more on nonproductive coping (in particular the strategies to not cope, to use violent means to reduce tension, to self-blame, and to keep to self). There was no significant difference between both groups regarding strategies pertaining to the reference to others.

Table 2 Coping styles and strategies among BPD and non-BPD adolescents

Style and strategy	BPD *n* = 103	Non-BPD *n* = 64	*P*
Productive coping, mean (SD)			
Focus on solving the problem	51.6 (14.2)	53.9 (17.3)	ns
Work hard to achieve	59.1 (16.5)	67.0 (15.1)	0.01
Focus on the positive	49.5 (15.8)	54.6 (18.5)	ns
Relax	74.8 (20.1)	77.8 (17.0)	ns
Do physical recreation	58.9 (24.9)	67.2 (23.1)	0.05
Productive coping style	58.6 (13.6)	63.9 (12.4)	0.05
Nonproductive coping, mean (SD)			
Worry	54.3 (16.8)	48.3 (15.4)	0.05
Wishful thinking	50.9 (17.3)	48.6 (14.3)	ns
Not cope	53.5 (16.5)	41.9 (15.1)	<0.001
Use violent means to reduce tension	56.4 (16.5)	42.3 (13.1)	<0.001
Ignore the problem	51.4 (17.1)	45.8 (14.2)	0.05
Self-blame	62.0 (18.1)	48.7 (16.9)	<0.001
Keep to self	69.0 (17.5)	56.9 (19.9)	0.001
Seek to belong	59.2 (14.6)	53.6 (14.1)	0.05
Non productive coping style	56.7 (10.2)	47.5 (9.60)	<0.001
Reference to others coping, mean (SD)			
Seek social support	57.1 (18.7)	51.8 (9.2)	ns
Invest in close friends	61.0 (12.4)	61.3 (17.7)	ns
Social action	28.7 (9.2)	31.6 (12.5)	ns
Seek spiritual support	30.7 (21.4)	31.3 (17.2)	ns
Seek professional help	38.8 (18.7)	41.4 (18.4)	ns
Reference to others coping style	43.2 (10.5)	43.5 (11.5)	ns

ns = not significant

Coping and Suicidal Ideation in Adolescents With BPD Considering Suicide

Table 3 details univariate and multivariate analyses performed in the BPD group ($n = 103$) while controlling for age, sex, and depressive symptoms, to explore the relation between coping strategies as independent variables and suicidal ideation as a dependant ordinal variable. In the upper part of the table, significant associations ($P < 0.05$) in univariate analysis are presented while results for the multivariate analysis are presented in the lower part of the table. Odds ratios adjusted for the effects of age, sex, and depression are also presented in Table 3.

Age and sex were not associated with suicidal ideation in our sample. Depression as assessed by the BDI significantly contributed to suicidal ideation in the group composed of adolescents with BPD considering suicide. Despite this association, 2 coping strategies were found to be independently associated with suicidal ideation in our sample. The strategy, to focus on solving the problem, predicted the severity in suicidal ideation. Conversely, the strategy, to ignore the problem, consisting of consciously blocking out the problem, independently decreased suicidal ideation in our adolescents with BPD considering suicide sample. Our regression model combining 3 coping strategies, age, sex, and depression, explained 30% of the observed variance.

Coping and Suicide Attempts in Adolescents With BPD Considering Suicide

No significant association was found between coping styles and the number of suicide attempts in the BPD group. Only 1 coping strategy, to seek professional help, was associated with the lifetime rate of suicidal attempts at the time of inpatient admission.

Discussion

Clinical and Coping Characteristics

Overall, the clinical characteristics of our BPD sample in comparison with adolescents without BPD were consistent with previous reports. Compared with adolescents without BPD, adolescents with BPD presented more severe suicidal ideation and behaviour, and depressive symptoms as assessed with the BDI-II self-report. The mean score was above the clinical threshold in both groups. However, no difference was observed for MDDs and SUDs, as assessed with the

Table 3 Coping and presence of suicidal ideation in the BPD group (*n* = 103): univariate and multivariate analyses

Univariate analysis: Spearman's correlation test	Correlation	*P*		
Focus on solving the problem	0.28	0.01		
Ignore the problem	–0.26	0.05		
Seek professional help	0.29	0.01		
Multinomial logistic regression	OR		95% CI	*P*
Focus on solving the problem	1.052		1.018 to 1.092	0.01
Ignore the problem	0.972		0.946 to 0.998	0.05
Age	1.231		0.366 to 4.669	ns
Sex	1.26		0.902 to 1.788	ns
Depression (Beck Depression Inventory)	1.04		1.001 to 1.084	0.05

ns = not significant

K-SADS-PL. Discrepancies between self- and clinician-rated measures of depression are commonly reported.[49] Female sex and young age,[50] and personality disorders[51] are among the most common factors associated with higher scoring on self-report measurements of depression. The characteristics of our sample, composed of mostly female and partly adolescents with personality disorders, might have contributed to the relative overestimation of depressive symptoms, compared with the clinician evaluation with the K-SADS-PL. In addition, no significant difference between the 2 groups was observed with respect to age and sex. In summary, the higher rate of suicidal ideation and behaviour and depressive symptoms observed in the BPD group was not related to age, sex, or to the presence of MDDs or SUDs. The suicidal behaviour profile with frequent suicidal ideation, plan and impulse phobia observed within the subgroup of suicidal adolescents with BPD, reveals the intensity of the internal struggle against suicidal behaviour in this population. Unfortunately, such clinical features are most often covered by recurrent verbal threats, nonsuicidal self-injuries, and oppositional behaviours as suggested by the higher proportion of adolescents with BPD with ODD. Such a clinical picture may lead the adolescent's relatives to dismiss the actual lethal suicidal risk.

The results depicted a picture of adolescents with BPD who reported a significantly higher score of nonproductive coping strategies and style and a significantly lower score of productive coping strategies and style in comparison with the non-BPD group. Our findings in a clinical sample are consistent with results from a community sample found by Gardner and al.[31] They identified the same strong positive correlation between BPD and nonproductive coping. In our study, the nonproductive coping strategies used by adolescents with BPD considering suicide were mostly avoidant strategies (to not cope, to ignore the problem, and to keep to self). Of note, adolescents with BPD considering suicide presented themselves as frequently using violent means to reduce tension. Avoidant strategies could be viewed as ways of lowering the intensity of emotional disturbances. When confronting a stressful situation, people with BPD experience increasing difficulty to regulate their emotional state. This echoes the fact that emotional dysregulation is considered as a key factor in BPD.[52]

Coping and Suicidal Ideation in Adolescents With BPD Considering Suicide

While controlling for age, sex, and depression, coping in adolescents with BPD was associated with suicidal ideation. In the clinical sample, the multivariate analysis showed a significant positive association between the coping strategy to focus on solving the problem and the presence of suicidal ideation. The multivariete analysis also showed a significantly negative association between the strategy to ignore the problem and the presence of suicidal ideation. Thus, within the 10-day period after a suicide attempt, when using the productive coping strategy to focus on solving the problem, adolescents with BPD expressed more suicidal ideation. One of the explanatory hypotheses of this result may be that inpatient adolescents with BPD consider the suicide crisis as the main problem in the immediate aftermath of the suicidal attempt. Thus, the use of the strategy to focus on solving the problem may be experienced as an unsustainable rumination process, which fails to overcome the suicide crisis and consequently further increases suicidal ideation. Conversely, when using the nonproductive avoidant-coping strategy to ignore the problem, adolescents with BPD expressed less suicidal ideation. This is consistent with clinical experiences with adolescents with BPD often reluctant to retrospectively review the process of the suicide crisis.

Aside from seeking professional help, all other strategies appeared not to be associated with the suicide attempt rate in our BPD sample. Positive responses to this item, from the adolescents included in our inpatient sample, may be a reflection of the service use, rather than coping mechanisms per se.

Conclusion

Our study sheds new light on suicidal behaviours in adolescents. Firstly, adolescents considering suicide had a different coping profile according to whether they had

a BPD or not. Secondly, several nonproductive coping strategies (especially avoidant strategies) were negatively associated with suicidal behaviours, while some productive problem-focused coping strategies were positively associated with suicidal ideation and behaviours. Future studies regarding the impact of coping training on suicidal relapse should provide interesting perspectives concerning the care of these adolescents. These results suggest that one should not force problem-focused productive strategies in the immediate aftermath of a suicide attempt on adolescents with BPD. More broadly, our study has potentially important therapeutic implications derived from this new model that integrates risk factors and protective factors in psychopathology. Thus, opportunities for development of intervention programs targeting these protective factors emerge both in terms of prevention and care.

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