Emotion dysregulation associated with suicide risk in adolescent university students: A case study of USIU-Africa.

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Abstract

Suicide is a major mental health burden, and Africa has the highest burden globally. Adolescence is a turbulent developmental period with multiple transitions, growth, maturation, and emotional lability. Emotional dysregulation is a transdiagnostic risk factor associated with suicide risk. The current study examined associations between emotion dysregulation and suicide risk in a community sample of adolescents using descriptive-analytic, cross-sectional design. The study participants were 352 adolescents aged 18 and 19 and enrolled at the United States International University-Africa (USIU-Africa). The instruments used were the Difficulties in Emotion Regulation Scale (DERs) and The Columbia Suicide Severity Rating Scale Short Version (C-SSRS). Results indicated that 75.8% had low risk, 2% had moderate risk, and 22.5% had a high risk of suicide. In addition, participants with high suicidal risk had significantly higher emotion regulation difficulties than those with low suicidal risk, $p = 0.003$. In conclusion, emotion dysregulation is associated with suicide risk in adolescent university students.

Key Words: Suicide, Suicidal Thoughts and Behaviors, Suicide Risk, Adolescence, Emotion Dysregulation.

Introduction and Background

Suicide is a major mental health burden globally. Suicidal thoughts and behaviors (STBs) in adolescents are universal and common in low-and middle-income countries and high-income countries (McKinnon et al., 2016). Worldwide, 700,000 people die by suicide each year (WHO, 2021), 79% of whom are in low-and-middle-income countries (LMICs), and 11.2 per 100,000 in the African Continent (WHO, 2019). Kenya's suicide rate is 6.1 per 100,000 (World Population Review, 2023).

Adolescence is generally the developmental period between 10 and 19 years (WHO, 2013), whose start is marked by puberty, and its end is determined by cultural expectations (Arnett, 2015). Suicide is the third leading cause of death among adolescents globally. In the world, adolescents in their first year of university have a lifetime prevalence of 32.7% for suicidal thoughts, 17.5% for a suicidal plan, and 4.3% for suicidal attempts (Mortier et al., 2018). In Kenya, the overall prevalence of suicidal ideation is 23%, specifically 24.6% for females and 20.9% for males (Ndetei et al., 2022). This paper investigates emotion dysregulation as a major risk factor for STBs among adolescents in Kenya.

The World Health Organization (2014) defines STBs as thoughts about suicide, planning suicide, suicidal attempts, and death by suicide. STBs occur on a continuum where relatively low-risk behaviors are suicidal thoughts, and higher-risk behaviors are suicidal thoughts with a plan and single or multiple suicidal attempts (Posner et al., 2011). Unlike non-suicidal self-injurious behavior, suicidal behavior is self-initiated, with intent to die, and the individual believes the outcome of their behavior is death (Posner et al., 2014). However, most individuals who have suicidal thoughts do not attempt suicide. Research suggests that suicidal behavior can be passive (i.e., unwillingness to receive life-saving medical treatment and medication) or active (i.e., ingesting poison, hanging self). The lethality of suicide attempts is based on the degree of physical damage to one's body and the need for medical treatment or hospitalization. In addition, lethality refers to how likely the suicidal behavior may result in injury, such as an individual pulling the trigger on a gun, but the gun misfires. Of note, suicidal attempts and preparatory behaviors are risk factors for more suicidal attempts and death (WHO, 2014). Therefore, it is imperative for practitioners and the general public to understand the predictors of STBs among adolescents.

Several studies have been conducted on STBs. In the United States, Neacsiu et al. (2018) conducted a study on group psychotherapy as an intervention for emotion dysregulation and measured emotion regulation pre and post-treatment. The study participants were 44 adult males and females with single or co-occurring diagnoses, including a high risk for suicide, Major Depressive Disorder, and Generalized Anxiety Disorder. Study findings indicated that all participants reported high emotion dysregulation. Study results showed participants consistently used adaptive emotion regulation strategies, and their emotion dysregulation scores were within

the normal distribution for a non-clinical sample after treatment. The study concluded that individuals at high risk for suicide often underestimate how successful they are at using adaptive emotion regulation strategies to down-regulate emotional arousal.

Another study in the United States was by Czyz et al. (2019). Czyz and colleagues conducted a longitudinal study on predicting suicidal ideation among 34 adolescents aged between 13 and 17 years old post-hospitalization. At baseline, 52.9% of participants had attempted suicide before, and 32.4% had attempted within one month before hospitalization. Suicidal ideation was reported in 24.4% of all the responses ($n = 159$ events), and at least 70.6% of the participants reported having suicidal thoughts at least once in the 159 observations over 28 days. Frequency, duration, and urge for suicidality differed daily for approximately 50% of the time. This suggests that the participants may felt suicidal one day but not the next.

Mars et al. (2019) conducted a study in the United Kingdom on differences in risk factors between adolescents with suicidal thoughts and those who attempted suicide. Participants were assessed at 16 years old for suicidal ideation and suicidal attempts. Of 4772 participants from the Avon Longitudinal Study, 9.6% reported a lifetime prevalence of suicidal thoughts and 6.8% suicidal attempts. Adolescents who had attempted suicide were more likely to have a depressive, anxiety, or behavioral disorder. Females were at a higher risk of attempting suicide. Those who had attempted suicide had more risk factors.

An intercontinental study by Mortier et al. (2018) examined suicidal ideation and behaviors among first-year university students. The researchers sampled 13,984 first-year students in 19 universities from Australia, Belgium, Germany, South Africa, Mexico, Northern Ireland, Spain, and the United States. The investigators collected data on suicidal ideation and behavior using the self-report Columbia Suicidal Severity Rating Scale between October 2014 and February 2017. The data was collected online. The researchers estimated the lifetime prevalence of suicidal thoughts at 32.7%, suicidal plans at 17.5%, and suicidal attempts at 4.3%. Of participants with a plan to implement, 22.1% attempted suicide over time, while 5.4% attempted within the past four months. Results also indicated that 75% of the participants began having suicidal thoughts before 16 years. The investigators concluded that suicidal thoughts and ideations are prevalent in first-year university students, separate from demographic risk factors.

McKinnon et al. (2016) conducted a prevalence study on suicidal behaviors in 32 low-and middle-income countries (LMICs) with adolescents aged 13-17 years using the Global School-Based Health Survey. The researchers found that risk factors for suicidal ideation were similar across different parts of the world. However, the suicidal behaviors were different. The risk factors were physical assault, poor parental support, going to sleep hungry, few friends, feeling lonely, alcohol use, cigarette smoking, and bullying. An interesting result was that the African continent had the largest pooled 12-month prevalence of suicide ideation of 21.6% compared to other regions. The investigators suggested factors associated with HIV/AIDs and poverty may contribute to such a high prevalence. Kenya had a suicide ideation prevalence of 15.3% in the past 12 months. The researchers concluded that suicidal thoughts and behaviors in adolescents are universal and common to both LMICs and high-income countries (HICs) in Europe and North America.

In Kenya, Bitta et al. (2018) used longitudinal data from the Kilifi Health Demographic Surveillance System (KHDSS) to find out the rates of suicidal deaths in Kilifi County, Kenya. The researchers found out the cause of death using the WHO Verbal Autopsy Questionnaire. The investigators found that between 2008 and 2016, out of 13,316 deaths, 104 were deaths by suicide, which is 0.78% of all in the KHDSS. The study found more men than women had died by suicide. 19% of the deaths, the participants giving verbal autopsies reported that 19% of all the deaths were by suicide – the deceased had mental illness. The researchers caution that these rates are likely under-reported due to death by suicide being illegal in Kenya.

Zietz et al. (2020) investigated the prevalence of suicidal thoughts and behaviors (STBs) among adolescents in the western part of Kenya. The researchers used baseline data for this study from a larger longitudinal study and used a mixed methods approach to collect information. The study participants were 4084 adolescents aged between 15 and 19 from rural Kenya. Participants were administered with the suicide risk items from the Centre of Epidemiologic Studies Depression Scale Revised (CESD-R), World Health Organization Quality of Life (WHOQOL- BRIEF). The researchers found that 16% ($n = 652$) had suicide ideation, where 38% were at a low risk of suicide, while 12% ($n = 78$) were at a moderate-to-high risk of suicide. The study results also showed that gender-specific risk factors for suicidal thoughts and behavior were being sexually active among females and impregnating an adolescent female partner among male participants.

Other risk factors included emotional, physical, and sexual abuse, financial stress, and health concerns. The researchers concluded that abuse increased the likelihood of suicidal behavior.

Ndetei et al. (2022) studied the type, prevalence, and predictors of suicidal thoughts among high school, college, and university students. The researchers sampled 9742 (79% male) high school and university students between 15 and 25 years old. Data was collected in Nairobi, Machakos, Kitui, and Makueni Counties, and all institutions had student enrollment from different parts of Kenya. Instruments used were the Psychiatric Diagnostic Screening Questionnaire (PDSQ), The Washington Early Recognition Center Affectivity and Psychosis (WERCAP), and a questionnaire on socio-demographics and economic characteristics. Results included overall prevalence of suicidal ideation was 23% (95% CI 21.8-23.5%), with females (24.6%, 95% CI 23.4-25.9) having more suicidal thoughts than males (20.9%, 95% CI 19.7-22.1). Major depression had a prevalence rate of 20%. The researchers found that factors that increased the likelihood of suicide ideation were persons younger than 21 years, single, and enrolled in university rather than college or high school.

Literature shows well-established risk factors for STBs include the occurrence of a psychiatric disorder, being female, being a survivor of bullying, being a survivor of child maltreatment, exposure to violence in the family setting, high impulsivity, and personality trait of anger (Miller et al., 2013; Strohacker et al., 2021). Adverse childhood experiences (ACEs) (Anda et al., 2005) and a history of previous suicidal attempts also place one at high risk for suicide (Ward-Ciesielski & Rizvi, 2020). Furthermore, the Interpersonal-psychological theory of suicide (Joiner, 2005) and the Integrated motivational-volitional model of suicidal behavior (O'Connor & Kirtley, 2018) state burdensomeness, loneliness, impulsivity, feeling trapped, and feeling like a failure as factors that increase the likelihood of suicidal behavior. Literature suggests slight differences between risk factors for suicidal thoughts and suicidal attempts. Risk factors for suicidal ideation are similar across different regions of the world (McKinnon et al., 2016) but differ in individuals who attempt suicide in low-and middle-income countries. Risk factors for suicidal attempters include physical assault, poor parental support, food insecurity, few friends, feelings of loneliness, use of alcohol, smoking cigarettes, and being a victim of bullying.

Ongeri et al. (2022) found risk factors in the Kenyan context as unresolved conflicts in romantic relationships, frustration by unmet expectations, bereavement, discrimination due to sexual orientation, financial difficulties, and psychopathology. In addition, suicidal individuals are seen as weak or crazy, and the reason for suicidal behavior is a curse or witchcraft. Further, a suicidal attempt is also illegal in Kenya as per the Penal Code Section 22 with up to two years jail term (National Council for Law Reporting, 2009). Other context-specific risk factors for deaths by suicide include older age and male gender (Bitta et al., 2018), while single persons under 21 years and attending university are at risk for suicidal ideation (Ndetei et al., 2022). Risk factors for STBs are multiplex, and paths to death by suicide are many. Understanding predictors for suicidal thoughts and behavior is essential due to the rise in STBs in Kenya and globally. Contextual data on suicide is necessary for suicide prevention, early intervention, and to reduce the burden of mental health disorders.

Emotional dysregulation is a risk factor associated with STBs and psychopathology across the lifespan and in different populations (Colmenero-Navarrete et al., 2021). Adaptive emotion regulation modulates the duration, intensity, frequency, and type of physiological processes and inner feeling states (Eisenberg & Morris, 2002). Maladaptive emotion regulation denotes difficulty altering emotional experience and expression when faced with contextual demands (Cole et al., 2017). Developmental shifts in adolescence increase the vulnerability to emotion dysregulation due to more fluctuations in emotions and emotional reactions (Riediger & Bellingtier, 2022). Emotional problems experienced in youth include more frequent and intense negative emotions, low emotional clarity, and increased emotional instability that often exhausts available resources (van Roekel et al., 2016). Studying emotion dysregulation in adolescence is essential due to emotional lability and vulnerability to psychological problems experienced in this developmental period.

Although mental health disorders begin to develop, appear, and are first diagnosed in adolescence (Lee et al., 2014), little research has been done on adolescent mental health (Erskine et al., 2017). More so, risk factors for STBs are often misunderstood. Few studies have been conducted in Kenya on STBs in adolescents (Masha, 2022; McKinnon et al., 2016; Misigo, 2021; Ndetei et al., 2022; Ngondi, 2018; Nyagwencha & Ojuade, 2022; Mugambi et al., 2020; & Zietz et al., 2021). To the authors' knowledge, few studies have been conducted in Kenya on the

association between emotion regulation difficulties and suicide risk among adolescents in a university sample. The present study will examine the association between emotional dysregulation and suicide risk in adolescents enrolled in university. This study hopes to increase understanding of predictors of STBs.

Methodology

The current study was a cross-sectional, descriptive-analytic survey with 352 adolescents aged 18 and 19. Participants were enrolled at the United States International University-Africa (USIU-Africa), a private university located in Nairobi City County, Kenya. The inclusion criteria for the present study were (1) Undergraduate students, (2) Persons between 18 and 19 years, (3) Consent to participate, and (4) Enrolled in a general education course. By gender, the participants were 61.9% ($n = 218$) females and 38.1% ($n = 134$) males. Distribution by nationality was 72.5% of Kenyan participants ($n = 251$) and less than 5% from other African countries, India, Japan, and the United States. A cluster sampling procedure was used where the clusters were general courses. Ethical standards were considered. Before data collection, the USIU-Africa Institutional Review Board granted ethical clearance, and a research permit was obtained from the National Commission for Science, Technology, and Innovation (NACOSTI).

Data was collected from general education classrooms using two psychological instruments. The Difficulties in Emotion Regulation Scale (DERS) is a 36-item self-report questionnaire that measures individuals' clinically significant emotional regulation problems (Gratz & Roemer, 2004). The DERS has six sub-scales, namely (1) Awareness, (2) Clarity, (3) Acceptance, (4) Impulse, (5) Goals, and (5) Strategies. The DERS items are scored on a five-point Likert scale where 1 = almost never, 2 = sometimes, 3 = about half the time, 4 = most of the time, and 5 = almost always. Items 1, 2, 6, 7, 8, 10, 17, 20, 22, 24, and 34 were reverse scored, and the remaining items were summed to reach a total score. The total scores range from 36 to 180. A validity test for emotion regulation items revealed that all the items were valid, $p < 0.001$, except items 17 r (348) = 0.098, $p = 0.067$), 22 r (346) = 0.096, $p = 0.076$), and 24 r (348) = 0.031 $p = 0.558$). The investigator compared results with items 17, 22, and 24; either included or excluded, and did not find significant changes to the study results or research conclusion, thus retaining all the items in the analysis. The DERS does not have clinical cut-offs. Previous studies suggest the

clinical range is between 80 and 127 (Harrison et al., 2010; Staples et al., 2012). Scores between 0 and 79 were non-clinically significant, and scores between 80 and 127 were categorized as clinically significant. On DERs psychometric properties, Giromini et al. (2012) found that validity was good, as indicated by the concurrent validity analysis and the clinical-nonclinical sample comparison. The DERS on Nigerian samples was found to have excellent internal consistency, showing a Cronbach's alpha of .90 (Bello et al., 2022).

The Columbia Suicide Severity Rating Scale Short Version (C-SSRS) was used to measure suicide risk. The C-SSRS Short Version is a 6-item instrument that measures the type of ideation severity and suicidal behavior in the past month. Suicide risk categories were obtained by summing up the eight items measured using a binary scale. C-SSRS is suitable for screening for suicidal ideation and behavior in clinical and research settings (Posner et al., 2011). The C-SSRS meets Meyer et al. (2010) criteria for suicide-related ideation and behavior and has been used with university students in Kenya (Oji et al., 2021). The C-SSRS has good psychometric properties. Posner et al. (2011) found good convergent validity with other multi-informant suicidal ideation and behavior scales (r=0.52, p<0.001; effect size=1.22, N=472). The instrument is also reliable, with a Cronbach's alpha of 0.937 since the last visit and 0.946 for the past week. The rationale was to consider the items reliable if Cronbach's alpha is at least 0.7, as proposed by Taber (2018).

Data was manipulated using SPSS® v28 at a 95% confidence interval to compute correlations among variables. The total number of observations was 553. The participants who met the inclusion criteria for this study were 366. Observations with more than 10% of items missing completely at random for each instrument were excluded. The total number of entries included in the analysis was 352. The items for DERs were measured using Likert scales and were encoded as ordinal, while items in C-SSRS were encoded as nominal.

Results

C-SSRS items were summed up and classified as low, moderate, or high risk of suicide to determine the occurrence of suicide risk by gender. Responses of yes to items 1 and 2 indicated low risk, yes to item 3 but no to item 6 denoted medium risk, and yes to items 4, 5, and 6 pointed

to high risk of suicide. Of all participants, 75.8% had low risk, 2% had moderate risk, and 22.5% had high risk. Suicide risk among female participants was 75.1% had low, 2.3% had moderate, and 22.6% had high, while in male participants, 76.9% had a low, 0.7% had a moderate, and 22.4% had a high risk of suicide. A chi-square test of independence was performed to examine the relationship between gender and suicide risk. The chi-square test showed no statistically significant association between gender and suicide risk levels, $p = 0.546$.

To examine the relationship between emotion regulation and suicide risk, the total score of DERS was categorized into clinically significant and non-clinically significant. Of participants classified as clinically non-significant ($n = 20$), 95% had low risk, 0% had moderate risk, and 5% had high suicide risk. Among the respondents in the clinically significant category ($n = 320$), 74.8% had low risk, 1.8% had moderate risk, and 23.3% had high suicide risk. A chi-square test of independence results showed no significant association between emotion regulation difficulties and suicide risk levels, $\chi^2 (2) = 4.215$, $p = 0.122$ (See Table 1).

Table 1: Emotion Regulation Categories by Suicide Risk Cross tabulation

| | | Emotion Regulation Categories | | Total | χ^2 | p |
		Clinically nonsignificant	Clinically significant			
Suicide Categories	Low Risk	19	247	266		
	Moderate Risk	0	6	6		
	High Risk	1	77	78	4.215	.122
Total		20	330	350		

A one-way analysis of variance (ANOVA) was conducted to determine whether there was a significant difference in emotional regulation difficulty among suicidal categories (low, moderate, and high). The ANOVA results indicated that at least two categories differed significantly, $F (2, 348) = 6.105$, $p = 0.002$. ANOVA results showed that at least two categories differed significantly, $F (2, 348) = 6.105$, $p = 0.002$. Post-hoc analysis using Bonferroni-correction was performed to identify the groups with significantly higher emotion regulation difficulties. Bonferroni's post-hoc analysis showed that participants with high suicidal risk had

significantly higher emotion regulation difficulties than those with low suicidal risk, $p = 0.003$ (see Table 1).

Table 2: Bonferroni Post-Hoc Analysis for Emotion Regulation Difficulties by Suicide Risk

(I) Suicide Categories	(J) Suicide Categories	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Low Risk	Moderate Risk	-6.407	5.271	.675	-19.088	6.273
	High Risk	-5.487*	1.636	**.003****	-9.423	-1.5518
Moderate Risk	Low Risk	6.407	5.271	.675	-6.273	19.088
	High Risk	.920	5.407	1.000	-12.087	13.927
High Risk	Low Risk	5.487*	1.636	**.003****	1.552	9.423
	Moderate Risk	-.920	5.407	1.000	-13.927	12.087

Note. *The mean difference is significant at the 0.05 level, $F (2, 348) = 6.105$, $p = 0.002$

Discussion

Research has established links between emotion dysregulation and the risk of suicide among adolescents. The present study provides valuable information for practitioners and contributes to limited research on STBs in Kenya, as highlighted in the Kenya Suicide Prevention Strategy 2021-2026. The present study found that 75.8% were at low risk, 2% were at moderate risk, and 22.4% were at high risk of suicide. According to the Columbia Suicide Severity Rating Scale, Recent Version (C-SSRS), the low risk category in this study denotes having suicidal thoughts and high risk a suicidal plan or suicide attempt. The present findings suggest that all participants ($n = 352$) in the current study had STBs in the past month.

In contrast, previous research in community university samples indicates a prevalence of suicide ideation of 24.6% in female and 20.9% male participants (Ndetei et al., 2022) and a prevalence of 29.7% in students (Nyagwencha & Ojuade, 2022). Interestingly, the results in both studies are similar even though Ndetei et al.'s study had a much larger sample ($n = 9742$) and Nyagwencha and Ojuade's (2022) study had a lower sample size ($n = 138$). Further, Mckinnon et al. (2016) found suicidal thoughts prevalence of 15.3% in a Kenyan community adolescent sample, while Khasakhala et al. (2013) found an 82% prevalence of suicidal thoughts in a Kenyan clinical

teenage sample. Past studies suggest that the prevalence of STBs in clinical samples is much higher than in community samples. However, the current study does not support this.

The findings of STBs in the present study mirror those in clinical samples. The high prevalence of STBs may mean that the COVID-19 pandemic exacerbated psychological disturbance generally experienced in adolescence and may have led to undiagnosed psychopathology (Gracia-Fernandez et al., 2023). The study participants were likely in high school during the lockdown in 2020, and the pandemic may have negatively interfered with their adjustment. Current study results may also confirm that the first year of university is a turbulent time for students low in protective factors and lacking critical social and emotional skills, which may lead to emotional dysregulation and psychopathology (Riediger & Bellingtier, 2022). Another explanation for high levels of STBs is lability in the adolescent mental state. Research has shown that adolescents' frequency, duration, and urge for STBs and feelings of hopelessness, burdensomeness, and connectedness change regularly (Czyz et al., 2019). For instance, an adolescent may be sad and have suicidal thoughts one day but be happy and excited the next day. A methodology that captures suicidal risk over time may yield more reliable results. In addition, future studies could offer a more robust suicide risk assessment to examine STBs in one's lifetime. Lastly, such high levels of STBs are likely a combination of multiple factors, including adverse childhood experiences (ACEs) (Anda et al., 2005) and previous suicidal attempts (Ward-Ciesielski & Rizvi, 2020). Researchers may consider conducting studies to compare data sets with younger adolescents and emerging adults to see if differences in suicidal risk emerge.

It is also likely that the disparity in findings may be due to various tools used for past studies. Notably, the present study used the recent version of C-SSRS, which has eight items and asked about STBs in the past month, different from the more comprehensive C-SSRS Lifetime Recent-Clinical (Posner, 2008). Posner et al. (2014) emphasized that a comprehensive suicidal risk assessment includes a recent and lifetime history of STBs, preparatory acts such as putting a rope on the neck but changing one's mind, and the full range of attempts, including interrupted attempts. Future studies could compare the use of suicide risk assessments for reliability in the Kenyan context.

The study found no significant gender differences in suicide risk. In contrast, some studies show gender differences in risk for suicide. Males are more likely to die by suicide (Bitta et al., 2018), and adolescent females are at a higher risk of attempting suicide (Mars et al., 2019; Strohacker et al., 2021). Notably, previous studies in Kenya have examined suicidal ideation but not the severity of STBs based on suicidal intent and suicidal attempts using the Columbia Suicide Severity Rating Scale Short Version (C-SSRS) or other measures for suicide risk.

The current study found a statistically significant difference between emotion dysregulation and suicide risk. Participants with clinically significant emotion regulation difficulties and a high risk for suicide were 23.3%. These results support past research that show persons who had attempted suicide had heightened levels of emotion dysregulation (Ammerman et al., 2015), especially controlling impulsive behavior and lack of emotional awareness (Yang et al., 2021). Single or multiple suicidal attempts put one at high risk for suicide (Posner et al., 2011). Of note, individuals at high risk for suicide underestimate their success in using adaptive emotion regulation strategies to down-regulate emotional arousal (Neacsiu et al., 2018). Individuals at high risk must be reminded of healthy regulatory strategies and encouraged to use them.

For suicide prevention, future studies should consider psychological autopsies to understand predictors of suicide better. In addition, hospitals and health centers should be equipped with youth-friendly facilities for screening and monitoring of STBs for early intervention and suicide prevention. There is also a need for practitioners and the general public to be more aware of STBs through seminars, workshops, and training on psychosocial support systems to reduce the stigma associated with these behaviors. The Ministry of Health in Kenya may create systems that provide a protocol for patients with STBs and confidentially capture incidences of adolescent deaths by suicide. Further, clinicians may consider using artificial intelligence to detect STBs and guide adolescents toward suicide hotlines, health care centers, and hospitals for care. Clinicians also need to conduct thorough risk assessments, understand STBs and their correlates better, and take patients seriously when reporting STBs.

Conclusion

The study findings indicate the vital role of well-regulated emotions in preventing suicide. Emotion dysregulation is a significant risk factor for suicidal thoughts, suicidal attempts, and suicide in adolescents. The higher the emotion regulation difficulties, the higher the risk for suicide. Assessing for suicidal risk in health and community settings is important for suicide prevention, case conceptualization, treatment planning, and clinical intervention.

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