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Challenges and Opportunities in the Treatment of Adolescents With Substance Use Disorder and Suicidal Behavior

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Abstract

Many youth who present for substance abuse treatment report co-occurring suicidality. Therefore, it is important to learn about the characteristics of this population and effective treatment strategies. The purpose of this paper is to provide an overview of some of the key issues that arise when treating youth with substance abuse and co-occurring suicidality and to offer recommendations on how to approach these areas. Specifically, we discuss the potential utility of an integrated approach to treatment, and provide an overview of the characteristics of this treatment population, motivational and treatment engagement issues, the clinical management of suicidality in the context of treatment, and the effect of psychiatric comorbidity on treatment needs. We then discuss school, family, and peer issues that may arise as well as special considerations for the use of urine drug screens with this population. We conclude with recommendations for future treatment development research in this very important area.

Keywords

suicide; substance abuse; treatment; comorbidity; adolescence

Substance abuse and suicidality commonly co-occur among adolescent psychiatric populations. In youth receiving substance abuse treatment, 18% to 36% report a history of suicidal behavior (1-4). In recent reviews of the literature, the presence of a substance use disorder was noted to be associated with a 3- to 4-fold increase in suicide attempts (5). Moreover, adolescents diagnosed with a substance use disorder were 5 to 13 times more likely to die by suicide than adolescents without this diagnosis (4,6). Given the association between substance use disorders and suicidality, it is important to consider our approach to treatment and clinical research with this very difficult high risk adolescent population.

In this paper, we offer information on many of the clinical issues that arise in treating suicidal substance abusing adolescents. This information is based on our experience working with this population in the context of clinical trials for suicidal substance abusing teens. Specifically, our treatment development studies compare an integrated outpatient cognitive behavioral treatment for both substance use disorder and suicidality to enhanced standard care. We will review some of the key issues that should be considered when assessing and treating this population and offer recommendations for how to approach these issues. We will conclude

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with a discussion of areas in need of further development. It is our hope that this information will provide a valuable resource for both clinicians and clinical researchers working with suicidal substance abusing teens.

Need for an Integrated Approach to Treatment

Substance use and suicidal behaviors are interrelated problems. Functionally, they may share common precipitants, vulnerability factors, and maintaining factors (7). For example, a chronic stressor such as continuous conflict at home may serve as a trigger for both suicidality and substance abuse. An adolescent may experience suicidal thoughts or try to kill him- or herself because s/he wants to escape these family conflicts or problems. The same adolescent may also be vulnerable to use of substances to "self-medicate" or escape from related unpleasant feelings or problems. The interrelationship between substance abuse and suicidality is exemplified by the recent finding that an aftercare intervention for adolescent substance abuse was associated with reductions in suicidal thoughts, even though suicidality was not specifically targeted in the intervention (8).

Nonetheless, despite the interrelationship between suicidal thoughts/behavior and substance abuse problems, the care for the patient with these co-occurring behaviors often is fragmented (9). Adolescents often are referred to a mental health provider to address issues of depression and suicide risk and to a substance abuse counselor to treat substance abuse problems. This approach may be adequate in some cases, but it may be associated with problems. First, to the extent that there are functional commonalities between these two behaviors, it may be more efficient to treat both issues as the symptoms or outcomes of a pattern of behavior or developmental trajectory to which a common set of skills can be applied, rather than addressing them as separate entities. Further, sequential or parallel treatments in separate substance abuse and mental health systems may leave patients with conflicting messages and little chance of compliance with both treatment regimens, thus compromising the effectiveness of treatment (10). Many patients will not even accept a referral to a second treatment provider or type of treatment (11). Moreover, many, if not most substance abusing adolescents are not brought to treatment because they have expressed a desire for help; rather, they often are brought to treatment because their behavior is a concern to others (12). Therefore, it can be difficult for adolescents to form a working alliance with one therapist, let alone two separate treatment providers. As the therapeutic alliance has been shown to have a positive effect on retention and treatment outcome among adolescents (13,14), attending treatment with two providers may place adolescents at a distinct disadvantage.

One approach that can be used to address both substance abuse problems and suicidality includes the use of relapse prevention. Relapse prevention approaches are widely recognized and accepted in the substance abuse literature, such as the influential cognitive-behavioral relapse prevention program of Marlatt (15,16). Similarly, while the literature on suicide interventions does not typically draw upon the language or established relapse prevention approaches of the substance abuse field, interventions designed to prevent recurrent suicidal behavior are also in fact "relapse prevention interventions." Interventions for suicidal youths characteristically focus on reducing current distress, maintaining safety, and preventing future suicidal behavior. To that end, many of the same approaches for preventing future difficulties used with suicidal and substance using youths (e.g., anticipating future difficulties and alternative behaviors, recognizing maladaptive patterns or thought or decision-making) are similar, thus offering a potentially promising framework from which to develop integrated interventions. Below we address many of the common as well as some unique clinical issues that need to be considered when developing such an integrated intervention for suicidal substance abusing adolescents.

Who are these kids?

By the time adolescents have developed both substance use disorders and suicidal behaviors, teens and their families have likely endured multiple adverse life circumstances. On average, adolescents enrolled in our clinical trials have been depressed for three years, have had three prior treatment providers, are failing or have already failed out of school, and most have been hospitalized and prescribed psychiatric medications. The great majority have developed connections with deviant peer groups that contribute to or support their continued substance use behavior. If youths have tried to quit or cut down on their alcohol or substance use previously, these efforts typically have been unsuccessful or resulted in only short-term changes before relapse. Most youths either lack motivation to change or express considerable ambivalence about changing their alcohol and substance abuse behaviors, despite acknowledgement of difficulties that have arisen. As a result of their treatment history, and frustrations with their youths' substance use and comorbid externalizing behavior problems, many families have lost all faith in the mental health system, have doubts about their teenagers' ability to change, and present hopeless and disengaged.

Motivation and Treatment Engagement

Motivation, treatment engagement, and retention are important issues in both treatment of adolescent suicidality and substance abuse (17,18). For example, over half of adolescents who enter treatment following a suicide attempt have been shown to drop out of treatment prematurely (18) and do so earlier in treatment than non-attempters (median session attendance = 3 sessions vs. 11 sessions) (19). Rates of treatment drop-out for adolescent and adult substance abuse also are high (20), a phenomenon that has been linked in part to motivation (17) as well as poorer long-term outcomes (21). Youths who are highly ambivalent in treatment or not motivated to change will likely not practice skills, or try to make even incremental changes in their behaviors. In the case of suicidality, youths may prefer a passive approach to dealing with problems, waiting for crises or difficult situations to emerge, rather than proactively trying to anticipate and resolve problems. In the case of substance use, the reinforcement contingencies in the "real world" are simply so well-entrenched, with the short-term rewarding effects of substance use and peer acceptance, that efforts to effect or initiate change may be difficult to "translate" or generalize into the real world. Indeed, there exists some evidence for a neuropsychological basis to the focus on short-term rewards; studies that have used the "gambling task" among regular cannabis users have demonstrated that in this population, there is considerable focus on short-term reward, accompanied by neglect of long-term negative consequences (22). Hence, eliciting, fostering and reinforcing self-motivated reasons for change are central and of primary importance in the treatment of suicidal and substance using youths. Before other therapeutic work can proceed, the adolescent client needs to be motivated.

In a similar vein, it also is important to help motivate the parents of suicidal and substance using youths, which may be difficult given their history of frustrations with these youths and the fact that the treatment of these youths is often a prolonged process, marked by lapses or relapse. Moreover, treatment in and of itself can be viewed as burdensome. Families that enter into treatment often have multiple sources of stress and adverse conditions in their lives that make participation in treatment a burden, consistent with the "burden of treatment model" proposed by Kazdin (23). Among the most commonly cited sources of stress are obstacles associated with coming to treatment (e.g., conflict with work schedule, transportation difficulties, costs) and the perception that treatment is too demanding (e.g., too long or confusing) (23-25). In our experience working with this population as will be described in more detail below, it also is often that case that parents of suicidal substance abusing adolescents are struggling with their own psychological issues such as depression, anxiety, and substance abuse

problems, which undoubtedly impacts their ability to regularly attend and fully participate in the treatment. Therefore, when developing integrated interventions for suicidal substance abusing youth and their families, it is important to include the use of motivational techniques with both teens and their parents and to work through obstacles to treatment participation early in the treatment process.

Managing Suicidality and Safety Considerations

Suicidality may be experienced for a number of different reasons and it is important for the clinician to determine what role suicidality serves in each individual case. Much has been written about the role of suicidality in psychiatric samples in general. For example, in a sample of 120 adolescents who presented to a general pediatric hospital for a suicide attempt, multiple reasons for a suicide attempt were endorsed including: to get relief from a terrible state of mind (68%), to die (67%), to escape from an impossible situation (66%), to make people feel sorry for the way they treated you (35%), to make people understand how desperate you were feeling (34%), to find out whether someone really loved you (32%), to show how much you loved someone (25%), to seek help from someone (22%), and to try to influence someone (16%; 26). In our clinical work with suicidal substance abusing youth, we have found that for some adolescents, particularly those with severe depression, their suicidal behavior appears to be closely linked to an inability to see any solutions to their problems. Such adolescents, in our experience, seem to respond particularly well to individual cognitive behavioral treatment sessions, particularly those that focus on teaching problem-solving and cognitive restructuring skills.

Suicidal behavior by definition is associated with at least some intent to die, but for some adolescents, threats to engage in suicidal behavior may be used instrumentally, i.e., as a way of trying to control the environments. For example, some youth may make suicidal threats when their parents attempt to enforce an undesirable rule or consequence. In addition, the suicidal behavior of some teenagers may be jointly driven by a desire to die in the face of what is perceived to be an intolerable situation or persisting difficulties, and a desperate desire to effect some change in that environment. Similarly, some adolescents engage in behaviors that are self-harmful, but not suicidal per se, as a means to decrease conflict in their home or to spend time on an inpatient unit which they perceive as a means of escape from school and other problems. When it appears that self-harm or suicidal behavior is at least partly instrumental in intent, cognitive behavioral parent training and family sessions may be very helpful in addition to individual work. Under such circumstances, a central goal of parent training and family work will be to modify or eliminate the environmental factors that serve to reinforce or increase the risk for self-harm behaviors. However, it is very important to remember that even if it appears that suicidality is in part motivated by a desire to control the environment, the adolescent is still at risk for suicidal behavior and dying by suicide.

Therefore, regardless of the mixed motives associated with suicidality, it will be important for the clinician to tell the adolescent and parent that all suicidal statements and threats should be taken seriously and plans to ensure the adolescent’s safety should be implemented under all circumstances. For a description of suicide assessment and safety plans used in our work with suicidal youth, please see Spirito and Esposito-Smythers (27). Close parental monitoring and restriction or removal of access to means for attempting suicide is an important element of suicide plans.

Safety also can be an important issue even when youths are not overtly suicidal. For example, some youths at times evidence what can only be called a careless disregard for their own lives or safety by engaging in impulsive risk-taking behaviors or potentially lethal levels and/or combinations of substance use (e.g., combinations of several different types of pills with

alcohol). In such cases, for maintenance of safety, careful monitoring of the youth and peer groups is especially important, as well as treatment of difficulties that may trigger or precipitate such behaviors (e.g., poor affect regulation, poor family communication).

Psychiatric Comorbidities

Suicidal substance abusing adolescents present with different substance related and psychiatric comorbidities that pose various challenges for clinicians. In one of our clinical trials, 58% of adolescents were diagnosed with both an alcohol and cannabis use disorder at intake. Moreover, 100% were diagnosed with a co-occurring mood disorder (major depressive disorder, dysthymia, or depressive disorder NOS), 54% an anxiety disorder (generalized anxiety disorder, social phobia, panic disorder, post-traumatic stress disorder, and/or acute stress disorder), and 54% a disruptive behavior disorder (ADHD, oppositional defiant disorder, and/or conduct disorder) at study entry.

In our work with youth who abuse alcohol and cannabis, we have found that adolescents often are more easily motivated to reduce their alcohol use than their cannabis use. Many adolescents generally report that they are able to see a connection between their alcohol use and suicidality as well as associated negative consequences of intoxication (e.g., attempting suicide, dangerous or illegal behaviors, undesirable sexual behavior, trouble with parents or police). However, adolescents tend to report cannabis to be associated with more positive experiences (e.g. relaxation, creativity, gets mind off problems) and are less likely to see a connection between their cannabis use and psychiatric condition. Moreover, many parents with whom we have worked have reported negative attitudes toward youth alcohol use but more positive attitudes toward cannabis use, a message which is communicated to their teens both directly and indirectly, and which undoubtedly influences adolescent behavior. Nonetheless, some studies have indicated that cannabis use, particularly more prolonged or serious use, is associated with increased risk of suicidality (28). Therefore, when treating youth with cannabis use disorders, greater use of motivational techniques and psychoeducation with both the adolescent and parent, may be indicated.

As is evident above, suicidal substance abusing adolescents represent a heterogeneous group. In our work, the two most challenging subgroups of youth tend to be those who exhibit severe affective instability and those with a history of significant conduct problems. Adolescents who present with significant affective instability and impulsive dyscontrol often report sexual promiscuity, eating disordered behavior, and/or non-suicidal self-injurious behavior, all of which will need to be addressed in the context of treatment. They also enter treatment with more extensive histories of suicidal behavior and thus are at greater risk for future suicidal behavior. On the other hand, when working with suicidal substance abusing youth with significant conduct problems, predominant issues that will likely need to be addressed in the context of treatment include deviant peer networks and a lack of internal motivation for change. In our experience, parents often lack knowledge of the extent of their child's substance use and illegal behaviors and many parents have given up on parental monitoring believing that they no longer have any control over their child. Alternatively, some parents attempt to over exert control which leads to greater rebellion. Moreover, for many of these youth, their suicidal behavior tends to be impulsive in nature and of greater lethality. Therefore, effective treatment programs for this population will need to be comprehensive and flexible enough to accommodate these various clinical presentations.

School Issues

Many suicidal and substance abusing adolescents that are enrolled in our clinical trials have had significant school difficulties. They may be failing out of school upon study entry or already dropped out, may have poor school attendance, or may have had school disciplinary problems

such as suspension or expulsion because of substance use on the premises or skipping school. Some may have been socially promoted throughout much of their academic career and have little comprehension of work at their grade level. Some of these teens also have significant learning problems or undiagnosed learning disabilities. In this regard, it is notable that teenagers with significant reading disabilities are not only at high risk for dropping out of school, but they also have been found to have higher rates of suicidal ideation and attempts, and increasingly prevalent substance abuse problems as they get older (29,30).

Some parents of suicidal and substance abusing youths have difficulty advocating for their teenagers' academic needs. In particular, in schools with "zero tolerance" procedures for substance abuse, it may be difficult to discuss the needs of youths without risking their expulsion from the schools where they are having difficulties. In addition, some parents of these youths may have their own histories of academic non-success and financial and psychiatric issues that make it difficult for them to effectively advocate for needed services, or even be savvy about what might be available for youths. Despite the fact that some of these teens have been struggling in school for many years, many have not been offered any type of evaluation or educational services through the school. For such youths, one of the first points of intervention may need to be with the school system. Academic difficulties may foster hopelessness and frustration, and increase chances of further substance abuse and suicidal behaviors.

Through trial and error with this population, we have learned that school changes often are initiated more expeditiously, and in a more coordinated manner, if the schools are contacted by both the clinician and the parents. Although in some circumstances, it may be sufficient to help guide the parent through the process with little direct contact with the school, clinician contact often is very helpful in facilitating changes or evaluations, particularly when families are overwhelmed with their teenager's psychiatric and substance abuse problems, not to mention other accompanying life or family problems such as health issues, their own mental health difficulties, or limited financial resources.

Therefore, with parental permission and involvement, we often contact appropriate school officials at the start of treatment, schedule appointments with teachers and other school personnel, and diligently work with the school and parents to develop an educational plan for the adolescent when appropriate. This may include psychoeducational testing within the school system, the creation of a 504 plan (a legal document which falls under the provisions of the Rehabilitation Act of 1973 that is designed to plan a program of instructional services to assist students with special needs who are in a regular education setting), the provision of special education services and an individualized education plan (IEP), and/or regular communication regarding youth school attendance and performance between the school and parent. Through this process, the parent learns how to advocate for their child and about the services that are available by law within the school system. On occasion, in advocating for youths, it may be useful to provide psychoeducation about the effects of depression, along with assurances that the clinician will work closely with the school to help develop and ensure the success of any plans that have been created. At times, use of youth mental health and educational advocates, or a change of school venue also may be appropriate for meeting academic needs. A change of school venue additionally may be appropriate when the youths constantly have to face their substance using peer group at an old school, which places them at high risk for relapse, or when a school that is more structured or highly monitored is available as an alternative.

Family Issues

Families of substance abusing and suicidal adolescents, respectively, report many of the same problems including high family/parental conflict (31-33) low family cohesion (34-36), and

poor family communication (37,38). In our experience, these problems stem from multiple sources in addition to youth psychopathology such as untreated parental mental health issues and difficulties with parenting skills. Therefore, parent training and family therapy are a very important part of treatment with this population.

Parental mental health issues

In our experience, some parents of suicidal and substance abusing youth have their own mental health problems such as mood, anxiety, and substance use disorders. Some have sought treatment but are non-adherent to their medication and treatment regimens. Others may have undiagnosed and/or untreated conditions. Under such circumstances, it is advisable to encourage parents to adhere to their own treatment regimen or refer them for their own treatment if they are not currently receiving care. If they are willing to attend treatment, it is important to monitor their progress in treatment as well as that of their child. It may also be helpful to provide psychoeducation regarding how their condition, if left untreated, affects their child's health. However, it is often the case that parents are unwilling to seek their own treatment, particularly those with substance use disorders. Such parents also tend to have positive attitudes toward substance use. For example, in our experience working with parents with alcohol use disorders, many have been unwilling to lock up or remove alcohol from their home. Attitudes about alcohol and substance use may be evident in comments such as "I drank as a teenager so it would be hypocritical for me to tell my teenager not to use," "alcohol is only dangerous if used in excessive amounts," "as long as my child drinks under my roof then I know that he is safe," and "if I deny my child alcohol now then he will rebel and use dangerously when he is older."

Under such circumstances, psychoeducation regarding the effects of alcohol and drugs on youth psychiatric conditions can be helpful. For example, we share with the parent that alcohol/drug use is associated with increased risk of future suicidal behavior, increases the length of depressive episodes, decreases the effectiveness of psychiatric medications, and can be lethal when mixed with various psychiatric medications (5,39,40). Moreover, drugs such as cannabis often unknowingly are laced with other drugs. Therefore, while alcohol and drug use is illegal and dangerous for all youth, it can be associated with serious medical outcomes for teens with psychiatric conditions. Many parents are surprised to learn this information and are able to at least shift their attitudes toward the belief that alcohol and drugs are not safe for their child in particular because he/she has a psychiatric condition.

Untreated parental mental illness also is often associated with significant affect regulation difficulties. Parents with their own affect regulation problems often have angry and escalating conflicts with their teenagers which quickly spiral "out of control." There may also be high levels of "expressed emotion" in the home (e.g., communications characterized by high levels of hostility and criticism, doubts about patient's ability to make positive changes, criticism of the person rather than the behaviors (41); that can contribute to instability and volatility in the home environment, and may undermine movement toward positive change by the teenager. In studies of adults, expressed emotion among family members has been found to be related to higher risk of relapse in conditions such as schizophrenia and affective disorders (42,43). Among psychotic youths, high expressed emotion has been found to be related to higher risk of suicidal behavior (44). For a suicidal substance abusing teenager, such environmental conditions similarly can prove to be very dangerous and potentially trigger future suicidal and substance related relapse episodes, and can contribute to a sense of futility by the adolescent considering changes. Family therapy approaches, with particular attention to patterns of communication, and assistance to parents with their own affect modulation issues often is important. In some homes, particularly those with high levels of conflict or parenting difficulties, intensive home based family services, or in some cases, temporary removal from

the home, such as residential treatment, may be indicated for the child. Involvement with the Department of Children, Youth, and Families also is necessary when the home environment has become dangerous for the youth.

Lastly, when dealing with their own mental health issues such as depression, some parents may also find it difficult to attend to or praise adolescents for positive steps that they are making, especially when they are interspersed with periodic difficulties. Parents may be unaware of the need to praise positive behaviors, believing that it is only necessary to comment "when things are going wrong." In such cases, therapists may need to prompt or even help guide parents into "how to catch their teenagers" engaging in positive or desired behaviors.

Parenting Style

Another particularly challenging issue that has arisen relatively commonly includes work with parents who possess conflicting maladaptive parenting styles. This often occurs when working with parents who are divorced. In many of these cases, the divorce ended acrimoniously and the child is caught in the middle of continuing parental struggles. The child is triangulated between two parents who attempt to form an alliance with the child against the other parent. Each parent blames the other for their child's problems. Typically, one parent possesses a laissez-faire parenting style and the other, in an attempt to compensate, adopts an authoritarian parenting style. Not surprisingly, the teenager most often favors the laissez-faire parent over the authoritarian parent. Moreover, fully knowledgeable about the family dynamics, the teenager will often play into these dynamics as a means to engage in deviant behavior. For example, when the authoritarian parent denies the child's request for a privilege, the child then contacts the laissez-faire parent to seek permission and advocate on his/her behalf. This generates an argument between parents and in some cases the authoritarian parents gives into the laissez-faire parent and the child succeeds in his/her quest.

In our experience, parent training sessions have proven to be extremely helpful when working with parents with opposing maladaptive parenting styles. This format allows the clinician to directly address the relationship issues that are affecting parenting decisions, discuss how the child is using the family dynamics to his/her advantage, teach appropriate parenting techniques, and problem-solve through potential obstacles, all of which are best addressed without the adolescent in the room.

Although the behaviors of parents can shape or influence their teenagers' behaviors, it is also true that teenagers' behaviors impact parental mental health and their parenting styles. That is, there is bidirectional interplay or transactions between parents and adolescents who have difficulties. Sometimes the adolescents' problems or their consequences (e.g., suicide attempts, overdoses, runaway behavior) are so traumatic for parents that parents "walk on egg shells" or are afraid to engage in appropriate parenting behaviors or have normal expectations for their youths' behaviors. Parents also sometimes have taken leaves of absence from their work and curtailed other normal activities such as interactions with adult peers to focus single-mindedly on the problems that their teenagers are experiencing. In our experience, such tendencies by parents often back-fire, with parents becoming more anxious over time as they focus all of their energy on their youths' behaviors over which they do not have total control. It also becomes more difficult for parents to have "perspective" as they view their teenagers' course. Moreover, adolescents may react to the parental anxiety or take advantage of parental tentativeness in setting limits. In these cases, it often is useful to encourage parents to try to maintain their usual activities, acknowledging that their adolescents' difficulties may be very demanding in terms of effort. It is also important for parents to be told that in order to help take care of their teenagers, they first have to take adequate care of themselves.

Another problem periodically encountered with these families is that, out of concern for their children, parents try to "rescue" their children or save them from the natural consequences of their maladaptive behaviors such as school consequences or legal charges because of apprehension of the effects of these consequences on the adolescent's mental health. While acknowledging such risks, rescuing behaviors can "enable" problem behaviors by removing adolescents from negative consequences that could function to reduce the likelihood of problem behaviors in the future. Hence, within limits, parents may need guidance in allowing their teenagers to experience the naturally occurring negative consequences of their behaviors.

Peer Issues

In working with suicidal substance abusing adolescents, it is important to address peer issues that contribute to the maintenance of substance abuse and suicidality. Having substance abusing and deviant peers has been linked clearly to adolescents' substance use (45,46) and predicts negative treatment outcome (47). Similarly, youth may learn about suicide risk behaviors through peers and engage in these behaviors, in part, to fit in with an unhealthy peer group and/or to avoid peer rejection. Indeed, the interpersonal influence of suicidal friends has been shown to predict suicidality among adolescents (48). Also complicating treatment is the fact that many of these adolescents do not have any peer relationships that are supportive of healthy and non-drug using behaviors. Therefore, when restricted from spending time with deviant peers, they are left with no friendships. Moveover, given that adolescents gauge their behaviors and ground their identity in their peer group interactions, it may be especially difficult for teens to enter new groups, or to see other groups as having similar interests or values.

In our experience, we have attempted to address these issues in number of ways. In individual work, we help the adolescent develop communication and social skills needed for healthy peer relationships as well as identify opportunities to meet new healthy peers. We also garner parental support and reinforcement for these efforts. In addition, parents are taught parental monitoring skills which when applied appropriately help deter the adolescents from engaging in deviant behavior. The use of in-home urine drug screens also can be used in this regard. Some adolescents choose to discontinue deviant peer relationships when they know that they are being monitored for or cannot use alcohol or drugs. Others choose to maintain their deviant relationships despite the fact that they cannot use alcohol or drugs with them and find different ways to spend time when in their presence. However, these latter teens often remain at higher risk for relapse upon completion of their treatment program if their parents do not persevere with their monitoring skills.

Use of Urine Drug Screens

Urine drug screens are a very important part of substance abuse treatment, including suicidal substance abusing teens. However, there exists variability in the manner in which they can be administered and reliability issues associated with their use that should be considered.

In addition to false negatives, false positives on urine drug screens can also arise, particularly with youth taking psychiatric medication. Newer psychiatric drugs that have not yet been rigorously tested may come up positive on drug screens as a drug of abuse. For example, recent research suggests that Venlafaxine (Effexor) may show up positive as PCP on urine drug screens (49). Therefore, it is important for treatment providers to be aware of this possibility and to do related research as needed.

It may also be advisable to use multi-panel urine drug screens when treating suicidal substance abusing youth. Lacing of drugs such as cannabis is a common phenomenon. While some teenagers are aware that their drug of choice has been laced, others are not. As many suicidal substance abusing adolescents are taking psychiatric medications for comorbid conditions

(depression, anxiety, etc.), they may unknowingly use a drug that negatively interacts with their psychiatric medication. Therefore, the multi-panel screen can be used a means to monitor for such safety issues. The use of a multi-panel screen may also help discourage teens from substituting their drug of choice with a different drug that they do not believe is being monitored for by the treatment team.

Another decision that will have to be made when working with this population is whether to disclose the results of urine drug screens to parents. Some treatment programs do not disclose results of screens to parents but address positive screens with adolescents as part of the treatment process. Other programs disclose results as a standard part of the treatment process. In our experience working with suicidal substance abusing adolescents and their families, we have found that disclosure of screens to parents has significantly enhanced treatment outcome for most adolescents. It has been particularly helpful for adolescents who still have some desire to please their parents. Disclosure of screens has also proven helpful when parents are willing to consistently administer consequences for positive screens. This technique has not proven as helpful in families where the child is aware that their parent has prosocial attitudes toward substance use or in families where the parent is inconsistent in the administration of consequences for use. One additional caveat of disclosing results of screens is that adolescents may refuse to attend session if they have recently used substances and know that their use will be detected. This issue is particularly problematic for suicidal youth who require close monitoring by the treating professional. However, this can be remedied by use of in-home screens, particularly when the adolescent refuses to attend sessions. Moreover, if the adolescent refuses a urine drug screen when requested, either in session or at home, it may be recorded as a positive screen and appropriate consequences ensue.

There is a set of procedures that we employ to help prevent family conflict around positive screens, which is particularly important when working with a highly acute treatment population. During the consenting and intake process it is made clear that urine drug screens are administered as part of treatment and results are disclosed to parents. In the first session, we also talk with parents about the fact that their child is in treatment because he/she is struggling with substance abuse issues and that treatment takes time to work. Therefore, it is important not to get upset at the start of treatment if their child has a positive screen. However, clinicians will still need to evaluate the stability of the child, parent(s), and home situation, before deciding to disclose the results of urine drug screens to the parent or recommending use of in-home urine drug screens.

Recommendations for Future Research

Given the heterogeneity of issues faced when treating suicidal substance abusing adolescents, a flexible approach to treatment may best meet the needs of these youth and their families. Furthermore, an effective treatment with this population will need to include individual adolescent sessions, parent training sessions, and family therapy sessions. Unfortunately, to date, there are no published studies demonstrating the effectiveness of interventions for suicidal, substance abusing adolescents. This may in part be due to the risk involved, and complexity of problems often found in this population. Indeed, research studies focused on interventions for substance abuse problems often exclude suicidal youths, just as some treatment studies for suicidal teens exclude youths with the most serious substance abuse problems.

Nonetheless, this is a multi-problem group of youth with multiple service needs. There are several mental health interventions that have the potential to be efficacious for this population. One flexible cognitive behavioral approach that includes a focus on skill-building, affect dysregulation, and reductions in self-destructive behaviors is dialectical behavioral therapy

(DBT: 50). In several studies, DBT has been shown to be efficacious in reducing suicidal behavior among adults (51,52). Linehan and colleagues (53,54) have described a modification of DBT that has demonstrated preliminary efficacy in reducing substance use among adults. Modifications of DBT for use with adolescents, that include family involvement, have also been described (55).

Another intervention that may hold promise is multisystemic family therapy (MSFT; 56). MSFT is considered to be a flexible, need-based, in-home family intervention that can provide a cost-effective alternative to more intensive forms of treatment such as psychiatric hospitalization. MSFT was developed for adolescents with externalizing behavioral problems. In addition to family therapy, MSFT may include behavioral or cognitive-behavioral therapy approaches and a coordinated effort to work with schools and the community. MSFT has been shown to yield decreases in substance use for treated youth (57). MSFT also has been shown to be associated with decreases in attempted suicide over time for youth (58).

As previously described, we also have been developing and pilot testing integrated, flexible, and modular cognitive-behavioral relapse prevention approaches for suicidal, substance abusing youth. This approach includes individual, parent training, and family therapy sessions. Through our treatment development work, we have learned that assigning an individual therapist and family therapist to each case has many advantages. For example, with two therapists involved, the individual therapist can work with the adolescent to not only focus on issues related to substance use and suicidality, but also to help prepare the adolescent for and tolerate significant changes in his/her environment. The family therapist, in turn, can work with the parents to teach them how to implement changes in the home and how to support the adolescent. We have been able to accommodate adolescents with various presentations by teaching all adolescents a basic skill set (e.g., problem-solving, cognitive restructuring, affect regulation, substance refusal skills, coping with urges to use) to address common skill deficits exhibited by suicidal substance abusing youth and offering additional modules that employ the same set of skills to target other types of problems as needed on an individual basis (e.g., non-suicidal self-injurious behavior, aggression). Moreover, after learning the basic set of skills, clinicians can repeat any and all skills as needed to address individual needs. The same approach is used by the family therapist in parent training and family sessions.

In conclusion, treatment development work with this high risk adolescent treatment population is in its infancy. While potentially promising treatment approaches are being investigated, there is still much to learn about working with suicidal substance abusing youth and their families. It is our hope that the information provided herein spurs additional interest in this very important area and serves as a springboard for much needed future research.

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