



Substance Use Disorders and Suicide

Jennifer Olson-Madden, PhD

Clinical/Research Psychologist

VA VISN 19 MIRECC,

University of Denver School of Medicine (Psychiatry)



Overview of Presentation

- Overview of Substance Use Disorders
- Understanding Substance Use Disorders and Suicidality
- Substance Use Disorders + Comorbidities + Suicidality
- Implications for Assessment and Intervention
- Resources

Substance Type

- Alcohol
- Marijuana
- Amphetamines
- Methamphetamine
- Heroin
- Cocaine
- Barbituates
- “Club” drugs (ecstasy, hallucinogens)
- Tobacco
- Steroids
- Sedatives/Tranquilizers
- Inhalants

Substance Use Dimensions

- Type
- Frequency
- Quantity
- Time Frame
- Developmental Stage
- Problems/Sequelae
- Disorders

Adapted slide by Clark, 2000



Definitions

Substance Abuse: Maladaptive pattern of substance use, with clinically significant impairment or distress, in same 12-mth period, characterized by *one or more* of the following:

- Recurrent use resulting in failure to fulfill obligations
- Recurrent use in physically hazardous situations
- Recurrent substance use-related legal problems
- Continued use despite persistent/recurrent problems caused by the effects of the substance

Definitions

Substance Dependence: Maladaptive pattern of substance use, leading to clinically significant impairment or distress, manifested by *three or more* of the following at any time in the same 12 mth period:

- Tolerance (Need for markedly more, or markedly diminished effect)
- Withdrawal (Withdrawal syndrome, or substance is taken to relieve/avoid withdrawal)
- Substance taken in larger amounts or longer period of time than intended
- Persistent desire or unsuccessful efforts to control use
- Great deal of time spent obtaining or using substance
- Decrease in (or no) time spent doing other important activities
- Continued use despite persistent/recurrent problems caused by substance

Risk Factors

- Availability and societal “tolerance” of the substance
- Social Factors/Learned Behaviors
- Genetic Predisposition
- Sensitivity to the Substance
- Other mental health problems

Substance Use Disorders are a significant public health problem:

- Impact on Health
- Societal Costs
- Personal Consequences
 - Runaway youth/Homeless
 - Social and Financial problems
 - Impulsive and may engage in other high-risk behaviors

SUDs Stats

- 3.8% general population has a SUD in any given year
- 375,000+ VA patients diagnosed with SUD (FY 07)
- In the general population, SUDs occur more frequently among youth and adults, compared to older persons; **75% developed by age 27**
- Particular at-risk groups are American Indians and Alaskan Natives

SUDs Treatments Available

- Professional therapies
 - Cognitive Behavioral Therapy
 - Motivational Enhancement/Interviewing
 - Withdrawal Management
- Medication
- Self-Help/Peer/Community Support
 - Alcoholics Anonymous, Narcotics Anonymous
 - Most helpful when combined with professional treatment

Alcohol/Substance Use Disorders and Suicide



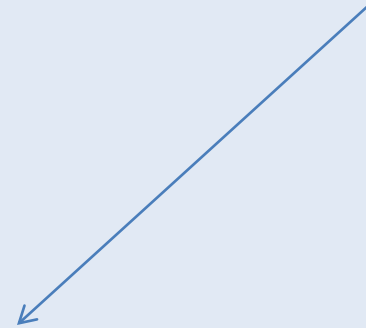
Why the link?

- Intoxication by drugs or alcohol may:
 - Decrease Inhibition
 - Increase Aggressiveness
 - Impair Judgment
- Specifically, alcohol intoxication plays a proximal risk factor for suicide
- Alcohol also increases the lethality of some medications, making an attempt via overdose more likely lethal

Shared Risk Factors

Substance Use Disorder

Suicide



Depression

Impulsivity

Thrill Seeking/Life-Threatening Behaviors

Goldston, 2004

The Bigger Picture

- SUDs = 2nd most frequent risk factor for suicide...**6.2X** greater than avg risk
- In ED visits, over 132,500 were alcohol- or drug-related suicide attempts
 - 85% were seriously ill enough to warrant medical admission
 - 15,000 involved drug-related attempts by youths
 - HALF of those involved use of pain medications

(IOM, 2002; Molnar et al., 2001; Office of Applied Studies, 2007c)



Alcohol Use Amplifies Suicide Risk

- Between 40-60% of those who die by suicide are intoxicated at the time of death
- 18-66% who die by suicide have some alcohol in their blood at the time of death
- Middle- or older-aged alcoholics at greater risk than younger alcoholics
- Alcohol use disorders are a significant risk factor for “medically serious” suicide attempts

Suicide and Alcoholism

- 25%-30% suicides are by those with a diagnosis of alcohol abuse or dependence
 - Among alcohol dependents, 7-15% individuals complete suicide
- Risk factors among alcoholics include:
 - Family history of alcoholism
 - Early onset of drinking and alcohol dependence
 - Higher alcohol intake

Adapted from a slide by Preuss, 2001; SAMHSA, 2010



Alcohol as a Predisposing Risk Factor

- Depressionogenic effects
 - Depressive illness may be co-morbid or independent of alcohol abuse
- Promotion of adverse life events
 - Negative affect
 - Impaired problem-solving skills
 - Aggravation of impulsive personality traits
 - Loss of social networks or isolation
- Genetic Predisposition

Brady, 2006

Alcoholics with History of Suicide Attempts:

- More likely to be severely impaired because of **comorbid psychiatric** problems and other **substance use disorders**
- More severely impaired due to **alcohol-dependence characteristics**
- Have stronger **family history** of suicide attempts (first degree relatives)

Adapted from a slide by Preuss, 2001



Menninger:

“Alcohol dependence is a type of chronic suicide”

Substance Use Disorders
And
Co-Morbid Mental Illness
And
Suicide

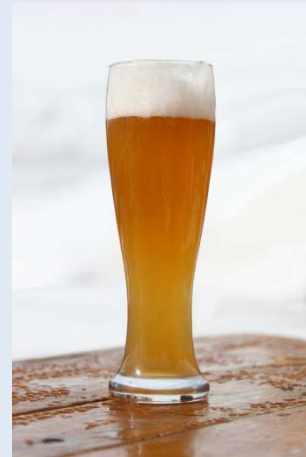


Co-Occurring Disorders should be EXPECTED

Drugs/Alcohol \longleftrightarrow Mental Illness

(SAMHSA, 2002; Jane-Llopis & Matytsina, 2006)

SELF-MEDICATION



Alcohol and Depression

- Alcoholic suicide attempters = more likely to be depressed than non-alcoholic attempters (Chignon et al., 1998)
- Between substance induced depression and independent depression: 41% alcoholics had a depressive episode (26% substance induced; 15% independent) (Schuckit et al., 1997)
- In autopsy studies, 89% alcohol-dependent suicides demonstrated history of other psychiatric illness (Foster et al., 1997)
 - 25% had unipolar depression
 - 22% had major depression (Henriksson et al., 1993)

Psychiatric Diagnoses and Suicide in a Veteran Population

- **Main Outcome Measures** Psychiatric diagnoses were obtained from patient treatment records in FY 1998 and 1999 and used to predict subsequent death by suicide during the following 7 years in sex-stratified survival analyses controlling for age.
- **Results** In the 7 years after FY 1999, 7684 veterans died by suicide. In diagnosis-specific analyses, patients with bipolar disorder had the greatest estimated risk of suicide among men (hazard ratio, 2.98; 95% confidence interval, 2.73-3.25), and patients with substance use disorders had the greatest risk among women (6.62; 4.72-9.29)
- **Conclusions** Although all the examined psychiatric diagnoses were associated with elevated risk of suicide in veterans, results indicate that men with bipolar disorder and women with substance use disorders are at particularly elevated risk for suicide.

Alcoholism and Personality Disorders

- 376 pts in treatment for alcohol use disorders
- 55% had a personality disorder
 - 3 clusters: A (paranoid, schizoid, schizotypal); **B (histrionic, narcissistic, borderline, antisocial)**; C (avoidant, dependent, obsessive-compulsive, depressive, negativistic)
- 25% attempted at least once



Suicide Risk Greater

Add known risk factors such as depression, marital status, aggression and impulsive traits → individuals with borderline personality disorder and who live alone are at **highest risk** for suicide

Characteristics of Most Serious Attempts

- Alcohol dependent + borderline personality disorder = high intent to die
- High risk for attempts = high risk for completion

Violent Means


- Vets diagnosed with mental disorders (e.g., PTSD, depressive disorders) are at increased risk of committing suicide by violent *and* non-violent means
 - More severe/chronic → generally non-violent means
- Vets diagnosed with a SUD who commit suicide are more likely to do so by **violent methods**

Implications for Assessment and Treatment



Warning Signs

- Increased use over time/Preoccupation
- Increased tolerance for the substance
- Difficulty controlling use
- Withdrawal symptoms
- Consequences (family, work, social, legal)
- Continued use in spite of problems
- Co-Occurring with other Disorders



Aside from restricting availability of
alcohol.....

Effective interventions for substance
and alcohol use may help reduce
suicide risk and rates

Alcohol and Substance
Dependence =
Psychiatric Disease

NOT a Habit!

Take Home Points from the Literature

- SCREEN for Substance Use
- SCREEN for Psychiatric Illness
- SCREEN for Family History of Suicide
- TREAT Substance Abuse and Mental Illness
CONCURRENTLY
- Limit access to lethal means

RESOURCES



- Substance Abuse and Mental Health Services (SAMHSA):
<http://www.samhsa.gov>
- Centers for Disease Control and Prevention (CDC)
Preventing Suicide: Program Activities Guide
http://www.cdc.gov/ncipc/dvp/Preventing_Suicide.pdf
- National Institute on Drug Abuse:
<http://www.nida.nih.gov>
- National Institute on Alcohol Abuse and Alcoholism:
<http://www.niaaa.nih.gov>
- Suicide Prevention Resource Center (SPRC):
<http://www.sprc.org>
- Suicide Prevention Lifeline:
<http://www.suicidepreventionlifeline.org>

- Best Practices Registry:
http://www.sprc.org/featured_resources/bpr/index.asp
- American Association for Suicidology:
<http://www.suicidology.org>
- American Foundation for Suicide Prevention:
<http://www.afsp.org>
- Department of Veterans Affairs: www.va.gov
- <http://www.mirecc.va.gov/visn19/>

Thank You

JENNIFER.OLSON-MADDEN@VA.GOV

<http://www.mirecc.va.gov/visn19/>

