

on alcohol and suicide in the youth

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interactions at different stages of both processes are possible

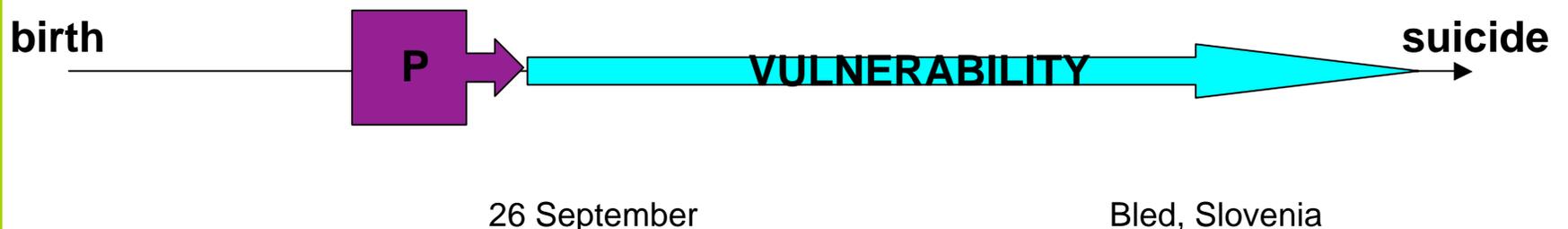
- the suicidal process
 - passive ideation
 - active ideation
 - plan
 - intent
 - attempt

 - improvement
 - recovery
- development of dependence:
 - acute reinforcement
 - social substance taking
 - misuse
 - dependence

 - withdrawal
 - recovery

precipitator or vulnerability

- risk factor as precipitator vs. risk factor as vulnerability
 - e.g. chronic drinking behavior (dependency from alcohol, liver cirrhosis, unemployment, being divorced, ...) would represent a vulnerability type of risk factor
 - e.g. acute alcohol intoxication with the disinhibiting effect (providing “guts to do it”) would represent a precipitator type of risk factor for suicide



why alcohol?

- drugs-related risk factors as life events (precipitators) for suicidal behavior should be:
 - disinhibiting (increasing impulsivity and aggression), e.g. alcohol
 - anxyogenic perhaps
 - hallucinogenic perhaps
- drugs-related risk factors as vulnerability for suicidal behavior should be:
 - depressogenic in a long run, e.g. alcohol
 - leading towards social isolation, e.g. alcohol
 - leading towards physical illness and other risk factors, e.g. alcohol

toxicology analysis of the youth suicide

- *perret et al (2006)* studied suicides in the young people of geneva
- toxicology analysis showed
 - **alcohol** in 26% and
 - other drugs in 67% of cases
- the most common drugs
 - benzodiazepines
 - cannabis and
 - cocaine

external validity

- *kirmayer et al (1998)* studied attempted suicide among inuit youth
 - mental disorder, **recent alcohol abuse**, and cocaine or crack use were the strongest correlates of attempted suicide for females, while
 - solvent use and number of recent life events were the strongest correlates for males

recent drunkenness and suicidality

- *king et al (2001)* studied psychosocial and risk behavior correlates of youth suicide attempts and suicidal ideation
- 1285 randomly selected children and adolescents, aged 9-17 years, of whom
 - 3.3% had attempted suicide and
 - 5.2% had expressed suicidal ideation only
- after adjusting (sociodemographic characteristics, mental disorder) a significant association persisted between suicidal ideation or attempts and (among others):
 - **recent drunkenness** and
 - **current smoking**

heavy alcohol use does precipitate young male suicide

- *carpenter* (2004) used the widespread variation across states in the timing of adoption of tougher drunk driving laws for drivers under age 21 - "zero tolerance" laws
 - statistically significant reductions in suicide among young males (not older, not females!) aged 15-20 associated with adoption of laws on the order of 7 to 10 percent

coping and suicidality

- *kidd & carroll (2007)* examined the impact of coping strategies employed by homeless youth upon suicidal ideation and attempts
- greater risk was associated with
 - avoidant coping
 - social withdrawal
 - **use of drugs and alcohol as coping**

underlying family history of abuse?

- *wagner et al (2003)* reviewed on family risk factors for youth suicidal behaviors
 - among other family characteristics
 - **family history of alcohol/substance abuse** were more strongly associated with completed suicide than with other suicidal symptoms
 - the dose-effect characteristic?

underlying mental disorder?

- odds ratios for risk factors for adolescent completed suicide are (*brent et al, 1993*):
 - major depression (OR=27),
 - bipolar disorder (OR=9),
 - psychoactive substance use disorder (**OR=8,5**) and
 - conduct disorder (OR=6)
- elevated suicide risk in adolescents diagnosed with psychoactive substance abuse disorder can be best explained through
 - **comorbid conduct and mood disorders** (*kaminer, 1996*)

conduct disorder and alcohol dependence

- among boys with **conduct disorder**, alcohol dependence increased the risk for life-threatening suicide attempt over **nine-fold** (95% CI 1.2-80.1) (*ilomaki et al, 2007*)

impulsivity!?

- *rossow et al (1999)* investigated alcohol abuse in attempted compared to completed suicide in young and middle-aged men
- a 25-year follow-up study of a cohort of 46490 swedish male
 - a relatively stronger impact of alcohol abuse on attempted (OR 8.8) than on completed suicide (OR 2.4) remained after controlling for mental disorders
 - among those who attempted suicide, alcohol abusers were found to have a significantly lower risk of completed suicide than other suicide attempters (OR 0.46)
- a possible impact of **intoxication and impulsiveness** on non-fatal suicidal behavior in alcohol abusers?
- impulsiveness often underlies substance use and suicide behavior and contributes to their covariation; substance use can further increase impulsiveness and thereby exacerbate offending and suicide risk in young offenders (*putnins, 1995*)

a model of action I

risk factors for suicide in alcohol dependency (*murphy, 2000; preuss et al, 2003; roy, 2000, demirbas et al, 2003*)

- **suicide threat, previous suicide attempt**
- **current drinking**
- **more severe course of alcoholism**
- **earlier onset of dependence and consequences of harmful drinking**
- **other drug dependences**
- **comorbid mental disorder**
- **recent loss of a close person**
- **poor (actual, perceived) social support**
- **unemployed, single**
- **childhood trauma**
- **poor physical health, serious medical problems**
- **impulsive, aggressive behavior**
- **low self-esteem, anxiety trait**

a model of action II

alcohol as an example

neuropsychological deficits

- attentional bias
- poor problem solving
- impaired decision making
- impaired generation/implementation of alternative coping strategies

social factors

- lack of (perceived) social support
- promotes taking and provides easy access to other psychoactive substances

increased
- **impulsivity**
- **aggressiveness**

greater chance of developing
**loser status, lack of escape,
no rescue**
resulting in **helplessness,
hopelessness**

**SUICIDAL
BEHAVIOR**

can alcohol predict suicide method?

- *kosky & dundas (2000)* studied factors associated with deaths by **hanging** among young people in australia
 - most were males
 - a quarter were indigenous persons
 - half the deaths occurred in regional or rural areas
 - unemployment, the experience of personal loss, mental disorder and **alcohol use** were possible precipitating agents



how to prevent

to conclude with



prevention of drug misuse and abuse can be prevention of suicide and the other way around

- by:
 - informing about the limits of healthy drinking / prevention of binge drinking
 - giving attention to other disinhibiting drugs / specific risk environments
 - restricting suicide means
- with special focus on work & unemployment policy in younger adults
- also by adopting strategies for high risk groups
 - e.g. adolescents with diabetes or other physical illness, ...
- and most of all, by strengthening the protective factors:
 - social support
 - effective problem solving strategies, coping with stress
 - working on self-esteem
 - public education (attitude change, stigma, ...)