Development of Chemical Dependency in Adolescents & Young Adults

How to recognize the symptoms, the impact on families, and early recovery
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Introduction

- 15% of high-school seniors used a prescription drug non-medically in the past year\(^1\)
  - When asked how prescription narcotics were obtained for nonmedical use, 70% of 12th graders said they were given to them by a friend or relative

- Marijuana use is increasing and daily use has also been increasing – 22.7% of 12 graders used in the last month\(^1\)

- 62% of eighth-graders and 83% of 10th-graders report that alcohol is readily available to them, and almost half (41 percent) of 10th-graders have been drunk at least once\(^2\)
Contributing factors: genetics

- Twin studies have consistently demonstrated genetic influences on use and abuse of substances\(^3\)
- Adolescent twin studies show more robust correlations than adults\(^4\)
Contributing factors: genetics

- Between 40 to 60 percent of diagnosed substance use disorders (SUD) show clear links to genetic influence\(^5\)
- Individuals with an identified genetic link to a SUD have an approximately 50% greater risk than the general population of developing a SUD
Contributing factors: family

- Substance use by parents or older siblings, or permissive attitudes toward substance use predict greater risk of youth substance use and abuse.\(^6\)
- Parental monitoring and family rules prohibiting use deter use among youth in the family.\(^7\)
Contributing factors: family

- In the US there are 7 million children under the age of 18 living with alcoholic parents.
- Children of alcohol abusing parents show significantly greater risk for many medical and behavioral problems including, learning disorders, delinquent behavior, ADHD, psychosomatic complaints, and alcohol abuse as adults.$^8$
Contributing factors: friends

- Having friends who use alcohol, tobacco, or other substances is one of the strongest predictors of substance use by youth
- Increased availability equates increased use
Contributing factors: other

- Media influences are significant and increasing
- Increased exposure to alcohol in advertising increases likelihood of adolescents experimentation\textsuperscript{10}
Adolescent development

- Brain development continues throughout adolescence, particularly in the frontal lobes
- Frontal lobes are essential for higher functions such as response inhibition, emotional regulation, planning and organization
- Development in the pre-frontal lobes likely aids in the filtering of information and suppression of inappropriate behavior\(^\text{11}\)
Adolescent development

- Immaturity of the brain development likely confers greater vulnerability to the toxic and addictive actions of chemicals
- The drug itself may directly affect brain development\(^\text{12}\)
Adolescent development

- Mood altering substances share 2 effects during withdrawal,
  1. Decrease in dopamine receptors (which leads to tolerance)
  2. Hypofunctioning of the prefrontal cortex

- Together, they increase incentive to increase use of these substances\(^\text{13}\)
Adolescent development

- Continued substance abuse likely impairs both an already immature prefrontal cortex, and further decision making processes.

- Adolescents with an alcohol use disorder use fewer strategies to learn new information, and demonstrate reduced memory that continues to deteriorate with continued alcohol use.
Psycho-social pattern, origins

- Development of a substance use disorder (SUD) often follows a developmental pattern
  1. Genetic predisposition (as discussed)
  2. Exploratory use leading to “activating response”
  3. Discovery that chemicals can be used for active and ongoing mood management
Psycho-social pattern, first level

- Increasing use leads to deterioration in performance; social, educational, family
- Self-concept is threatened by adverse events leading to lowered self-definition
- Increasing difficulties lead to increased use of defensive mechanisms and isolation; growing reliance on rationalizing and denial
Psycho-social, second level

- Increasing use of defenses and isolation, coupled with beginning and often unsuccessful attempts to manage chemical use, lead to breakdown of trust with family and other important relationships
- Families either reject or attempt to accommodate dysfunctional member, leading to exacerbation of family dysfunction
Psycho-social, third level

- The individual's ability to function within structured systems begins to fail
- Gradual fall from quality systems to less demanding systems
- Depending on substance, physiological dependence has begun\textsuperscript{15}
Signs and Symptoms

- Changes in eating and sleeping habits, extreme hyperactivity, tremors, red or watery eyes
- Sudden changes in emotion such as loss of interest, lack of motivation, depression, dishonesty, moodiness, or isolation
- Poor school attendance or deterioration in grades
- Stealing or unaccounted for money
- Deterioration of appearance
A Simple Screen

- Screen/assess for chemical use or abuse
  - The CRAFFT instrument developed by Knight et al. is a 6 question developmentally appropriate screening tool.
  - While all seem to be effective, the CRAFFT has emerged as the most reliable and validated protocol, most easily administered either verbally or written, and best suited to adolescents.
CRAFFT

- C Have you ever ridden in a car driven by someone (including yourself) who was “high” or had been using alcohol or drugs?
- R Do you ever use alcohol or drugs to relax, feel better about yourself, or fit in?
- A Do you ever use alcohol or drugs while you are by yourself, alone?
CRAFFT

- **F** Do you ever forget things you did while using alcohol or drugs?
- **F** Do your family or friends ever tell you that you should cut down on your drinking or drug use?
- **T** Have you ever gotten into trouble while you were using alcohol or drugs?
CRAFFT

- Two or more yes answers suggest a significant problem, abuse, or possibly dependence.
- Often, if clients are willing enough to answer these questions, they may be willing to accept a discussion regarding their choices.
If Treatment is Needed

- Is the program accredited or licensed? National accreditation programs (such as the Joint Commission, the National Committee for Quality Assurance and the All-States) look for elements of treatment that research has shown to be effective.

- Are staff members licensed or credentialed? Credentials held by addiction professionals include LADC (licensed alcohol and drug counselor), LPC (licensed professional counselor), CAC (certified addictions counselor), or CCDP (certified co-occurring disorders counselor).
If Treatment is Needed

- Does the program use evidence-based practices? A treatment center should be measuring how effective their services are as well as using research-based methods.

- Is gender-specific programming offered? Research shows males and females recover from addiction differently and have the best opportunity for recovery when separated by gender.

- Are detoxification services offered? Comprehensive, medically-supervised detoxification ensures that patient is medically stabilized before beginning the treatment process.
If Treatment is Needed

- Is programming individualized? Each person’s needs are unique and require an individualized treatment plan based on specific history, issues and needs.

- Are treatment services holistic? Effective programs address mental, physical, and spiritual health.

- Are recovery management resources provided? Treatment doesn’t end when the patient walks out the door. Recovery support should follow the patient.
Treatment Gaps

- An enormous gap exists today in meeting the addiction treatment needs of our nation’s young people. An estimated 2.9 million young people ages 12 to 17 meet the criteria for diagnosis of alcohol or drug dependence, but only 8% receive treatment.

- Approximately half of the people coming into treatment for heroin in Minnesota are white males ages 18 to 25\(^1\)

- Your role is helping more young people get identified and treated is crucial.
Early recovery, beginnings

- Typified by the momentum of psychological defenses colliding with the reality of the SUD
- Withdrawal symptoms
- Need for accurate assessment of all systems, coupled with a decision to recover
- Stages of change, variable
Early recovery, intermediate

- Ongoing sobriety, identification as a recovering individual
- Recognition of need to take responsibility for past, make amends
- Earn or recover trust in relationships
- Build better quality relationships
Early recovery, momentum

- Recognition of and reorientation towards values
- Meaningful relationships, beginning rewards from previous efforts
- Recognition that recovery is dependent on personal growth, not external circumstances
- Beginning success in meaningful systems
Questions