Concurrent Disorders in Children and Adolescents

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OBJECTIVES

• Identify the etiology of concurrent disorders and how these impact adolescents and their families
• Understand assessment and treatment of concurrent disorders in adolescents
• Understand what recovery looks like in this population
• Many believe drug and alcohol use in the teenage years is “normal”
  – Most use without consequences
  – Recent Alberta stats indicate that over 70% of high school seniors drank alcohol
  – Half of the above have had a binge-episode once in the past month
    – (Binge-episode = 5 or more drinks at one time)
  – 3.6% of these youth drink daily
### Top 5 Substances Used by Youth

<table>
<thead>
<tr>
<th>Substance</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>71.5%</td>
</tr>
<tr>
<td>Marijuana</td>
<td>25.1%</td>
</tr>
<tr>
<td>Hallucinogens</td>
<td>4.6%</td>
</tr>
<tr>
<td>Ecstasy</td>
<td>3.8%</td>
</tr>
<tr>
<td>Cocaine</td>
<td>2.7%</td>
</tr>
</tbody>
</table>

2010 Canadian Alcohol and Drug Use Monitoring Survey (CADUMS)
KANDEL’S GATEWAY THEORY OF ADOLESCENT SUBSTANCE USE

• Adolescents tend to move along a specific progression, with fewer individuals using each agent in the sequence
  – Cigarettes, alcohol, cannabis, problem drinking, hallucinogens, stimulants, opioids
• Adolescents tend not to stop using the substances used earlier in the sequence
STAGES OF SUBSTANCE USE

– Experimental or social stage
  • Curiosity, peer influence

– Substance misuse
  • Actively seeking the pleasure derived from substances/escapism
  • Use is primarily on weekends, some deterioration in behavior
STAGES OF SUBSTANCE USE

- Substance abuse
  - Preoccupied with use
  - Substances are used during the week; knows how and where to obtain them
  - Substance using peer group
  - Significant impairments in functioning

- Substance dependence
  - Tolerance and withdrawal
  - Attempts to stop have been unsuccessful
  - Use has taken over their life
• The Canadian Centre on Substance Abuse
  – Provides guidance and knowledge, policy papers on prevention, collaboration
  – Low risk drinking guidelines for adults and youth
Low Risk Alcohol Guidelines for Youth (CCSA)

• Recommend:
  – Speak to their parents about drinking
  – Never have more than one to two drinks per occasion
  – Never drink more than one or two times per week

• Recommend that from the legal drinking age to 24 years:
  – Females never have more than two drinks a day and never more than 10 drinks a week
  – Males never have more than three drinks a day and never more than 15 drinks a week
ADDICTION: DEFINITIONS

• Abstinence
• Experimental use
  – Exploratory substance use without persistence
• Recreational use
  – Occasional use usually associated with social activities
  – Use below cutoff for high risk use for substance
• Medicinal use
  – Use of prescribed psychoactive substance to treat diagnosed medical condition
ADDICTION: DEFINITIONS

- Substance Misuse
- Substance Abuse
- Substance Dependence

ADDICTION: NEW DEFINITION

• Substance Use Disorder
  – Taking the substance in larger amounts or for longer than the you meant to
  – Wanting to cut down or stop using the substance but not managing to
  – Spending a lot of time getting, using, or recovering from use of the substance
  – Cravings and urges to use the substance
  – Not managing to do what you should at work, home or school, because of substance use
  – Continuing to use, even when it causes problems in relationships
  – Giving up important social, occupational or recreational activities because of substance use
  – Using substances again and again, even when it puts the you in danger
  – Continuing to use, even when the you know you have a physical or psychological problem that could have been caused or made worse by the substance
  – Needing more of the substance to get the effect you want (tolerance)
  – Development of withdrawal symptoms, which can be relieved by taking more of the substance.

Two or three symptoms indicate a mild substance use disorder, four or five symptoms indicate a moderate substance use disorder, and six or more symptoms indicate a severe substance use disorder.

RISK FACTORS

• Family History
  – Family history of alcoholism increases the risk of alcohol abuse/dependence in children by four times (Rounsaville et al, 1992)

• Perinatal Complications
  – Preterm delivery, low birthweight, anoxia, brain damage
  – Use of alcohol and other substances by mom during pregnancy
    • (Michaud et al, 1993)
RISK FACTORS

• Temperament
  – “difficult temperament”
  – High levels of behavioral activity
  – Reduced attention span
  – High impulsivity
  – Emotional reactivity
    • (Earls et al, 1987; Noll et al, 1992; Blackson 1994)
RISK FACTORS

• Parental Attitudes
  – Permissive toward the child’s drug use
  – Involving the child in the parents’ substance-use behavior
    • (Barnes et al, 1984)

• Family Conflict
  – Divorce during adolescence
  – Mothers who were underresponsive and underprotective to their children prior to age 5
    • (Shedler et al, 1990)
RISK FACTORS

• Education
  – In late elementary grades, academic problems have been found to predict early initiation of drug use and drug misuse
    • (Kandel et al, 1992)

• Peer Relationships
  – Having friends who use substances (Brook et al, 1990)

• Community
  – Low SE status
  – High crime rate
  – High population density
RISK FACTORS

• Early drug use
  – One of the strongest predictors of misuse, abuse, dependence
PROTECTIVE FACTORS

• Temperament
  – Resilient

• Education
  – Successful school performance

• Peer Relationships
  – Positive social environment

• Family System
  – Warm, supportive
  – Strong beliefs that oppose substance use

Addiction disorders in youth

• can lead to mental health disorders
• can complicate already diagnosed issues
• are often an attempt for youth to self-manage their underlying mental health problems
• impact family, peer relations and school success, and possible future outcome
### Prevalence in Adolescents

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADHD</td>
<td>3-7%</td>
</tr>
<tr>
<td>Depression</td>
<td>7-9%</td>
</tr>
<tr>
<td>Anxiety</td>
<td>2-4%</td>
</tr>
<tr>
<td>Psychosis</td>
<td>1%</td>
</tr>
<tr>
<td>PTSD</td>
<td>5%</td>
</tr>
<tr>
<td>Learning Disorders</td>
<td>3%</td>
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</tbody>
</table>
• Addictions and mental illness do not start when someone turns 18.

• 70% of mental health problems have their onset during childhood or adolescence
• 40% of teenagers treated in psychiatric programs were reported to have comorbid substance use disorder

• These rates go up to 80%+ in the juvenile justice system
“Concurrent Disorders” is defined as addiction coupled with a mental illness or chronic physical condition.

For adolescents, the combination of ADHD and cannabis dependence is the most common diagnosis pairing.
• 40-90% of adolescents with Substance Use Disorders (SUD) have comorbid psychiatric disorders
  – ADHD
  – Conduct disorder
  – Anxiety disorder
  – Affective disorder
# Comorbidities with SUD in Adolescents

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conduct Disorder</td>
<td>50-80%</td>
</tr>
<tr>
<td>ADHD</td>
<td>20-35%</td>
</tr>
<tr>
<td>Affective Disorders</td>
<td>24-50%</td>
</tr>
<tr>
<td>Anxiety Disorders</td>
<td>7-40%</td>
</tr>
<tr>
<td>Psychotic Disorders</td>
<td>1%</td>
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</table>
CONCURRENT ISSUES

- Common Related Psychiatric Disorders
  - Depressive Disorders
  - Bipolar Disorder
  - Anxiety Disorders
  - Trauma & PTSD
  - Schizophrenia
  - Organic Mental Disorders
  - ADHD
  - Conduct Disorder
  - Eating Disorder
When does a concurrent disorder happen?
- Mental health concerns come first
- Using substances come first
- Both problems start at the same time
- Mental health concerns and using substances start separately
• Can also occur during treatment
• Adolescents with co-occurring substance abuse and mental illness (concurrent disorders) can experience significant difficulty in achieving their optimal developmental potential

• It is important for comprehensive assessment and treatment as early as possible
• Increasing evidence suggests that concurrent disorders escalate faster when they start during adolescence, which makes early detection and treatment even more important.
ASSESSMENT

• Substance use history
  – What substances have you used?
  – How old at first use?
    • What, when, where, what was the situation
  – For each substance:
    • What, how much, peak use, effects of drug, withdrawal symptoms
  – What benefits?
  – What consequences?
  – How do you obtain substance?
    • Selling drug or themselves, stealing
  – Do you want to decrease/stop use?
  – What do you need to help stop use?
ASSESSMENT

• How to differentiate between a substance use disorder and a mental health concern
  – Timing
  – Symptoms
  – Purpose of use
  – Family history
  – Treatment response
ASSESSMENT

• Standardized Assessment Instruments
  – CRAFFT (Car, Relax, Alone, Forget, Family/friends, Trouble)
  – DUSI (Drug Use Screening Inventory)
  – POSIT (Problem oriented Screening Instrument for teenagers)
  – PESQ (Personal Experience Screening Questionnaire)
  – PEI (Personal Experience Inventory)
  – ADI (Adolescent Diagnostic Interview)
  – Teen Addiction Severity Index
  – GAIN (Global Appraisal of Individual Needs)
  – ADAD (Adolescent Drug Abuse Diagnosis)
  – PAI (Personality Assessment Inventory)
  – Urine Drug Screens
ASSESSMENT

• Urine Drug Screens
  – Must be obtained in a controlled setting
  – Length of time drug stays in body:
    • Cannabis – recreational user – 4 days
      – daily user – 1 month
    • Stimulants – 2 days
    • Cocaine – 3 days
    • Opiates – 2 days
    • SA Barbiturates – 1 day
    • Diazepam – 4 days
What does the literature tell us?

• Addiction care for both mental health and physical disorders **should be integrated**

• The goals of integration are:
  – to overcome fragmentation
  – reduce the prevalence of gaps in service
  – enhance continuity of care in patients
Four Quadrants of Severity

Quadrant 3
High level of addiction problems with low level of mental illness

SPECIALIZED ADDICTION CARE

Quadrant 4
High level of addiction problems with high level of mental illness

SPECIALIZED INTEGRATED CONCURRENT DISORDER CARE

Quadrant 1
Low level of addiction problems with a low level of mental illness

PRIMARY CARE

Quadrant 2
Low level of addiction problems with high level of mental illness

MENTAL HEALTH CARE

Level of addiction problems

Level of mental illness
ADDICTION-ONLY SERVICES

• Cannot accommodate psychiatric illnesses however stable and well functioning the individual

• Policies and procedures do not accommodate dual diagnosis:
  – psychotropic medications not generally well accepted
  – coordination/collaboration with mental health not routinely present
  – mental health issues are not addressed in treatment, and often sent on for referral elsewhere
DUAL DIAGNOSIS CAPABLE PROGRAMS

• BENEFITS:
  – Routinely accept co-occurring disorders
  – Can meet needs if psychiatric disorders are sufficiently stable; independent functioning so mental disorders do not interfere with addiction treatment
  – Address dual diagnoses in policies, procedures, assessment, treatment planning, program content, and discharge planning
  – Are trauma-informed (i.e., reduce re-telling of trauma story)
DUAL DIAGNOSIS CAPABLE PROGRAMS

• Have arrangements for coordination and collaboration with mental health services
• Can provide psychopharmacological monitoring and psychological assessment/consultation on site; or well-coordinated off-site follow-up therapeutic supports and interventions
DUAL DIAGNOSIS ENHANCED PROGRAMS

• Can accommodate unstable patients needing specific psychiatric, mental health support, monitoring and accommodation necessary to participate in addiction treatment

• Not so acute/impaired to present severe danger to self/others, nor need 24-hour, psychiatric supervision
• Concurrent disorders programs for youth are in almost every major city
• Toronto and GTA
  – Youth Addictions and Concurrent Disorders Service (YACDS)
    • Outpatient treatment for 14-24yo
    • Academic Day Treatment Program for 14-21yo
    • Academic Youth Day Hospital – intense outpatients
    • Concurrent Youth Unit – inpatients for 14-18yo
• Winnipeg
  – Manitoba Adolescent Treatment Centre (MATC)
    • Outpatient services to residential treatment

• Ottawa
  – University of Ottawa
    • Outpatient consultations
  – Dave Smith Centre
    • Opened in 1993 as a Day treatment Program, has evolved since 2010 into offering residential and aftercare treatment services
CANADA

- London
  - Addiction Services of Thames Valley
- Halifax
  - Choices Addictions
    - Ages 13-19yo
    - Health promotion and prevention
    - Community outreach
    - Outpatient clinical services
    - Day treatment program
    - Provincial 24/7 inpatient treatment service
CANADA

• Saskatoon
  – Calder Centre
    • outpatient treatment
  – Calder Centre Youth Stabilization Unit
    • Voluntary detoxification program
  – Calder Centre Youth Program
    • 12 bed residential treatment program
• British Columbia
  – Youth Concurrent Disorders
    • Under age 18
    • Family and Community Enhancement Services
  – The Provincial Youth Concurrent Disorders Program
    • Outpatient treatment for 12-24yo
    • Located in the BC Woman’s and Children Hospital
ALBERTA

• Youth Addiction Services (AHS)
  – Outpatient counselling
  – 12 week Day Program (Edmonton, Calgary)
  – 3 month Residential Program (Edmonton, Calgary, Lethbridge)
  – PChAD (the Protection of Children Abusing Drugs Act) – Grande Prairie, Edmonton, Red Deer, Calgary)
  – Voluntary (planned) Detoxification (Grande Prairie, Edmonton, Calgary, Lethbridge)
Calgary

- Adolescent Addictions Program
  - Outpatient treatment for age 13-21
  - Multidisciplinary team approach
  - All referrals go through Access Mental Health
• Concurrent (Addictions and Mental Health) Program
  CAMP

• OUR PHILOSOPHICAL AND TREATMENT APPROACH:
  – To effectively treat children and adolescents with concurrent addictions and mental health disorders via provision of evidence-based, trauma-informed, integrated, wrap-around, multi-disciplinary services, providing continuing care and support for them and their families.
A multi-disciplinary team providing voluntary outpatient services with the capabilities to provide the following:

- Thorough and comprehensive assessment of addiction and mental health disorders
- Treatment of concurrent disorders
  - Psychopharmacology
  - Individual/motivational therapy
  - Family therapy, Multi-family therapy
  - Group therapy
Our multi-disciplinary team:

- **Child Psychiatrist**
  - Child Psychiatry training – University of Calgary
    - 2 years of specialized child psychiatry training with focus on addictions and forensics
  - Consulting Psychiatrist to the Adolescent Addictions Program in Calgary for 1yr
  - Addiction Psychiatry Fellowship – University of Michigan

- **Clinical Practice Lead for Trauma and Addictions**
  - Expertise with trauma, addictions, FASD
  - Training from the Betty Ford Clinic, California
  - Participant in the Norlein Foundation Addictions Symposium

- **3.0 FTE Mental health therapists**
  - In Roads Training, Motivational Interviewing Training, Trauma, Addictions, and FASD Clinical Experience

- **0.5 FTE RN**
- **0.4 FTE Psychometrist**
- **0.5 FTE Administrative support**
CASAS’s CONCURRENT PROGRAM

- Opportunities for students to rotate through
- Collaboration with community agencies, schools to deliver services where the youth/family are at
  - YESS (Youth Empowerment Support Services)
  - Youth Addictions (AHS)
  - Terra Program
CASA’s CONCURRENT PROGRAM

• Criteria for CAMP
  – Age 10-17 (but will accept younger)
  – Primary care physician and/or specialist who will remain the responsible physician on record
  – Be involved in substance and/or alcohol use and/or defined process addiction behaviors, or at risk of developing an addiction
  – Have an Axis 1 mental health diagnosis (or concerns of one)
CASA’s CONCURRENT PROGRAM

- Accepting referrals beginning June 2013
  - Majority are self-referred or referred from the hospital
    - ADHD
    - Depression
    - Anxiety
    - PTSD
    - Psychosis
    - Cannabis, Alcohol, Ecstasy, Cocaine, Opiates, Meth, Ketamine, Hallucinogens, Nicotine, Salvia
    - Video gaming, social media, pornography
    - Complex family addiction and mental health issues
TREATMENT

- Experimental or Social Use
  - Education and counselling
    - i.e. Cannabis is not a “benign” drug

- Substance Misuse
  - Individual and group therapy
  - Family therapy
  - Abstinence contract
  - Motivational interviewing
TREATMENT

– Substance Use Disorder
  • 12-step programs
    – AA, 1939 by Bill Wilson, goal is abstinence
  • CBT
  • Intensive outpatient and partial hospital programs
  • Hospital, residential programs
  • Therapeutic community
• Education is key for prevention
  – Provide evidence-based assessment tools along with community partners for the purpose of early detection
  – Collaboration with community partners to improve early identification of at-risk families
  – Collaboration re: Parent education (including positive role-modeling) for at-risk children
  – Psychoeducation
HARM REDUCTION VS ABSTINENCE

• Harm Reduction Approach
  – Strategies focusing on minimizing consequences associated with substance use
  – Individual and group therapy
  – Education is the primary focus
  – Different than prevention programs that focus on abstinence and promote zero tolerance “just say no”
  – Coping skills, feedback, role playing
    • Rehearsing ways to refuse alcohol at a party
THERAPY

- CBT
- DBT
- Multisystemic therapy
- Motivational Interviewing
MOTIVATIONAL INTERVIEWING

• Encourage patients to discuss
  – Advantages and disadvantages of change
  – Advantages and disadvantages of the status quo
  – Confidence to change
  – Plans to change including support that is needed
BRIEF INTERVENTION (FRAMES)

Feedback

Responsibility

Advice

Menu of Options

Empathy

Self-Efficacy

http://pubs.niaaa.nih.gov/publications/aa43.htm
FAMILY THERAPY

• Help the family understand what the child is struggling with
• Communication
• Parenting strategies
GROUP THERAPY

• Different approaches have been used

• Athena Group (CAMP)
  – Girls, age 13-17

• Apollo Group (CAMP)
  – Boys, age 13-17
  – Coping with Anxiety, Self-Worth, Mindfulness, Healthy Boundaries, Dealing with Stress, Self-Awareness
Self-Help: AA, NA, CA, Women For Sobriety (WFS), SMART Recovery

- **Benefits:**
  - Minimally intrusive
  - Peer directed
  - Effective for those who attend

- **Negatives:**
  - Requires high degree of individual motivation
  - Need for medications variably understood

- **Recommend to patients with:**
  - Substantial self-motivation and recognition of addiction problem
  - Patient can attain and sustain sobriety
  - Stable living situation
  - As part of aftercare network following/during more intensive addiction treatment
MEDICATIONS

• Pharmacology
  – Antidepressants/Anxiolytics – SSRI’s
  – Benzodiazepines – for ETOH withdrawal
  – Atypical Antipsychotics
  – Opioid agonists
  – Naltrexone, Acamprosate, Disulfiram

**Remember the use of most of these medications are considered “off-label” use in children, and patients and families need to be advised of such

• The ideal medication should have low abuse liability, require infrequent dosing, be well tolerated, and have few side effects
  • Kosten and Kosten, 2007
RELAPSE PREVENTION

- Identify triggers for relapse: emotional, situational, associational
- Use relapse as an opportunity to review triggers that may have been overlooked
- Develop plans to deal with triggers
- Encourage active rather than passive coping strategies
RECOVERY

• What happens after treatment is finished?
WHAT TO AVOID

- Confrontation
- Labeling and Lecturing
- Exclusion from treatment
- Ignoring co-morbidity / target symptoms
- Enforced treatment
- Benzodiazepines
CONCLUSION

• Addictions and mental health concerns can begin in childhood
• When someone presents using substances, it is important to assess mood, sleep, anxiety, learning difficulties and other mental health issues
• Treatment varies on the presenting concerns and the individual
Thank You
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