

OPIOID USE DISORDERS IN ADOLESCENTS & YOUNG ADULTS

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OVERVIEW

Opioid use in Ontario adolescents and young adults

Special Issue in Adolescents

Primary Care and Front Line Providers: SBIRT

Treatment Approaches to working with youth


Pharmacologic Treatment options

Lessons learned

Case vignettes

OPIOID USE IN ADOLESCENTS

- Ontario Student Drug Use and Health Survey (OSDUHS) 2011
 - > 50% past year alcohol use
 - > 30% use illicit drugs
 - 22% cannabis use
 - **14% non-medical (NM) use of prescription opioid pain relievers**
 - 9% Cigarettes

 - Heroin use decreased over past decade (1.9% to 0.7%)
 - Opioids second most commonly used illicit substance after cannabis
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NON-MEDICAL USE OF PRESCRIPTION OPIOIDS IN ADOLESCENT STUDENTS

Reported past year drug use, 2011

- 12.9% male, 15.2% female
- Max at grade 11, 18% reported use
- Oxycontin specifically tracked in 2009
 - 2% reported use
 - males and females equally likely to use
 - peak grade 11
 - north region highest rates of use
- 2013?



HOME IS THE MAIN SOURCE FOR PRESCRIPTION OPIOIDS

- Among students who reported using opioid analgesics non-medically, 72% reported obtaining them from home
- Only 6% reported obtaining them from friends

Brands B, Paglia-Boak A, Sproule BA, Leslie K, Adlaf E. Nonmedical use of opioid analgesics among Ontario students. Canadian Family Physician. Vol 56. 256-62. March 2010.



OPIOID USE IN HIGH RISK YOUTH

Toronto Drug Use Survey 2010

- 72% reported non-medical use of PO among dance/club community
- High rates of opioid use in street youth
- 50% of female street youth reported use of Fentanyl
- Heroin 5-30% of street youth, 9% of dance/club youth
- Higher rates of transition to IV use
- Higher rates of overdose death, suicide and infectious disease transmission



OPIOID USE AND ADOLESCENTS: SPECIAL ISSUES

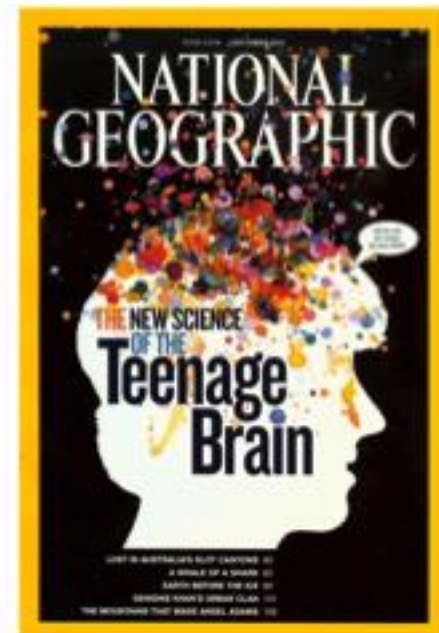
- Adolescent neurodevelopment and the impact of substances
- Physiologic dependence versus addiction
- Polysubstance abuse
- Comorbidity
- Consent



ADOLESCENT NEURODEVELOPMENT

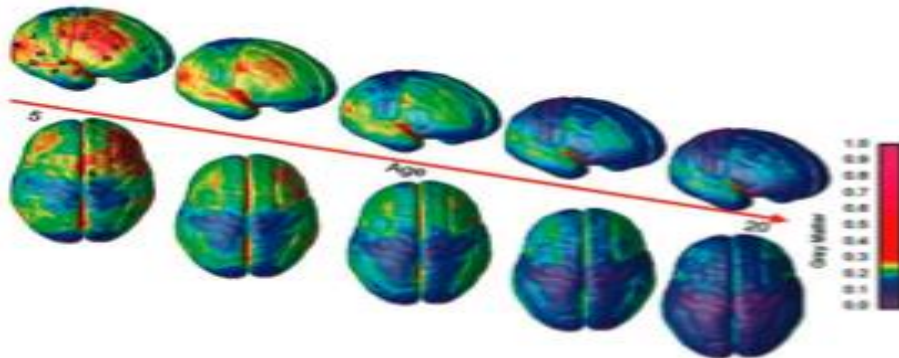
Early adolescence: peer engagement and separation from parents

Late adolescence: aspirations for future, including employment and relationships



ADOLESCENT NEURODEVELOPMENT

- Protracted prefrontal cortex development: lack of cognitive control
- Imbalance of more mature limbic system: risk taking behavior



THE ADOLESCENT BRAIN AND BEHAVIOR

- Impulsivity
- Emotional lability
- Distraction from salient cues
- Poor or limited task recognition and problem solving

The adolescent and young adult patient/client requires special consideration



DRUG USE AND NEURODEVELOPMENT

- **Episodic opioid use to abuse to dependence:** neuroplastic changes of cellular receptors, intracellular functions, protein translation and gene expression
- **Physical dependence and addiction:** changes to the neural reward seeking centres

Therefore, never underestimate the impact of early intervention



DEPENDENCE VERSUS ADDICTION: WHAT WE SEE

- Shorter drug use history
- Relapsing use versus persistent daily use
- Route of use
- Withdrawal symptoms
- Tolerance
- Use despite harm



POLYSUBSTANCE ABUSE: RISK FOR OVERSEDATION AND DEATH

- Alcohol: binge use
- Cannabis
- OTCs: Dextromethorphan, dimenhydrinate, sedating antihistamines
- Ketamine
- Opioids



COMORBIDITY

- Mental health symptoms
- Learning disorders and Behavioral issues
- Psychiatric disorders
- Drug use related medical issues
- Acute or chronic medical conditions
- Sleep and nutritional deprivation in street youth



HARMS OF YOUTH SUBSTANCE USE

Impact on:

- Neurodevelopmental tasks of adolescence
- Academic achievement
- Family
- Friends
- Decision making
- Sexuality
- Mental health



ADOLESCENT CONSENT FOR MEDICAL CARE

Health Care Consent Act (HCCA) 1996

No specific age of consent

Decision making capacity

Parental consent not necessary



HOW CAN PRIMARY CARE AND FRONT LINE PROVIDERS HELP?

- Support a youth friendly environment
- Raise the subject
- Develop a youth specific approach



DIVERSITY OF YOUTH: FLEXIBLE APPROACH

- Students
- Institutionalized youth: CAS, justice system
- First nations youth
- Rural and urban youth
- Gay, lesbian, transgendered
- Street involved, marginalized, and homeless youth
- IV drug using youth



ADOLESCENTS WITH SUBSTANCE USE DISORDERS IN YOUR PRACTICE

- Adolescent behaviors
- Behaviors of comorbidity
- Drug using behaviors
- Interactions with staff and other persons in your practice setting

Structure AND Flexibility



SCREENING, BRIEF INTERVENTION AND REFERRAL TO TREATMENT (SBIRT)

- Identifying adolescents and youth in your practice
- **Screening** tools; CRAFFT questionnaire, GAINS short screener
- DSM V; Opioid Use Disorders, mild, moderate, severe
- **Brief Interventions**; identify the issue, provide non-judgmental, age appropriate support and guidance, Motivational Interviewing
- **Referral to Treatment**; physician colleagues, community addiction programs



ASK: YOUTH IN CLINICAL SETTINGS

- “While you’re here, can I ask you a few questions?”
- “How is school/work going?”
- “How are things at home?”
- “Have you ever had alcohol to drink?”
- “Have you ever smoked marijuana or hash?”
- “Have you ever used pills or any drugs to get high?”
- “Have you ever driven in the car of a driver who had used alcohol or drugs?”

What next? SBIRT



SCREENING: CRAFT

Have you ever ridden in a **CAR** driven by someone (including yourself) who was “high” or had been using alcohol or drugs?

Do you ever use alcohol or drugs to **RELAX**, feel better about yourself, or fit in?

Do you ever use alcohol or drugs while you are by yourself, **ALONE**?

Do your family or **FRIENDS** ever tell you that you should cut down on your drinking or drug use?

Do you ever **FORGET** things you did while using alcohol or drugs?

Have you gotten into **TROUBLE** while you were using alcohol or drugs?



BRIEF INTERVENTION: FIVE PRINCIPLES OF MOTIVATIONAL COMMUNICATION

- Express Empathy
- Develop Discrepancy
- Avoid Argumentation
- Roll with Resistance
- Support Self-Efficacy



TREATMENT: APPROACHES TO WORKING WITH YOUTH

- Pharmacologic and behavioral approaches
- Long-term commitment
- Individual attention from staff
- Involvement of family members

of clients, 2009;44(14):1979-89. Methadone maintenance treatment for youth: experiences of staff, and parents. Substance Use Misuse.

- Harm reduction versus abstinence



HARM REDUCTION

Health Canada: Best Practices for Treatment and Rehabilitation of Youth with Substance Use Disorders 2001: Program Philosophy and Approach:

- acceptance of youth relapse as an inevitable part of recovery
- consideration of relapse not as a failure but as an opportunity to learn about substance use triggers and ways of reducing use
- a need to focus on client life goals and the impact of substance use on these rather than primarily focusing on substance use
- the development of a long-term supportive client - staff relationship which accepts and explores relapse
- the presence of program strategies to support youth re-engagement in treatment, if and when relapse has occurred

ACCEPT THEM FOR WHERE THEY'RE AT



RESOURCES FOR TREATMENT REFERRAL

Community Addiction
Physicians/methadone providers

Community Youth Addiction services

www.dart.on.ca



PHARMACOLOGIC TREATMENT OPTIONS

Abstinence:

Opioid taper

Symptomatic treatment of opioid
withdrawal

Naltrexone

Opioid Substitution Therapy:

Methadone

Buprenorphine



SYMPTOMATIC TREATMENT OF OPIOID WITHDRAWAL

- Clonidine
- Tazodone
- Gravol
- NSAIDs
- Acetaminophen
- Immodium
- Diazepam



OPIOID SUBSTITUTION THERAPY

- Maintenance versus detoxification
- Methadone versus Buprenorphine



BUPRENORPHINE

Buprenorphine may be the first choice for younger patients with:


- shorter durations of use and addiction histories
- histories of opioid abuse and addiction and multiple relapses but may not be dependent on opioids
- histories of use of other sedating substances
- a good prognosis for detoxification
- concerns about stigma
- no access to methadone

* Health Canada approval only for persons over age 18 years*



METHADONE

CPSO 2011 MMT Program Standards and Guidelines:

- G5.1 The MMT physician should consider abstinence based treatment and/or opioid substitution for withdrawal purposes for patient's under 18 years of age with a shorter duration of opioid dependence.
 - G5.2 The MMT physician should consider MMT for patients under 18 years of age only after a thorough assessment and discussion about all treatment options.
 - G5.3 The MMT physician should ensure there has been a discussion with patients under 18 years of age (and other family members where possible) about potential issues with methadone including side effects, risks and difficulty withdrawing and tapering off of methadone.
 - G5.4 The MMT physician should seek and document consultations, formal or informal, with a methadone provider prior to initiating a patient under 18 years of age on MMT.
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METHADONE IN ADOLESCENTS: LITERATURE REVIEW

“many disturbed adolescents are unlikely to achieve stability until they are through this stage of life” *BMJ 1971*

High rates of polysubstance abuse and psychiatric comorbidity

Length of time in treatment was the best predictor of outcome.

metanalysis, J of Sub Abuse Treat 2002

At least one year in treatment was associated with decreased heroin and cocaine use.

J Addict Dis 2006

Best outcomes with both pharmacologic and behavioral approaches.

Substance Use Misuse 2009



ADOLESCENTS AND YOUTH WITH SUBSTANCE USE DISORDERS IN YOUR CLINICAL PRACTICE

- Lessons learned
- Ideas?
- Knowledge translation: putting it into practice



CASES:

- JC, 16 years old, 5 months Hx of oxycontin use, initially from father's prescription bottle (a prescription you had provided), then from street purchase, has now progressed to heroin. Dad comes to you for advice.
- Social friend asks you about treatment options for a friend's friend's daughter who has been using percocet daily for 2 years.
- Same social scenario, the adolescent involved has been using percocet for one month since being prescribed for a wrist fracture
- TM, 21 years old, street involved and homeless, on MMT for 3years. As you come into the room, you notice he has taken some 3cc syringes from the counter top

