Adolescents and Young Adults with Chronic Pain and Substance Abuse: Assessing Risks and Utilizing Resources
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Conflict of Interest Disclosure
Sharon Wrona’s Conflicts of Interest
– No Conflict of Interest – nothing to disclose

Objectives
• The participant will be able to describe the risk factors for substance abuse in adolescents and young adults.
• The participant will be able to describe the assessment plan that was implemented in the pediatric pain clinic at Nationwide Children’s Hospital.
• The participant will be able to identify outcomes of the implementation of the process at NCH for opioid risk assessment.
• The participant will be able to identify areas for future focus related to opioid risk assessment in adolescents.
Teenagers may not realize that prescription medications can be as dangerous as illegal drugs when they are misused.

Case presentation

02/2010

- Pt is 16yo M with back pain for 1yr. History of Neurofibromatosis. History of multiple back surgeries 2005, 2006, 2007 with hard ware removal 8/2007 and PSF late 2008. He had onset of back pain approximately 1yr after posterior spinal fusion. He states his back pain is average 7/10, at worst 9/10 at best 5/10. It is constant & starts at mid back & goes to upper back midline & sometimes laterally. It has no radiation & no pain down legs. He has had good improvement with calcium. He has not had improvement with muscle relaxants. He was unable to tolerate Gabapentin (Neurontin®) because pills were hard to swallow. Heat & cold were not helpful. He has never had any therapies for his pain. He states NSAIDS were not of benefit either. He has home schooling because of many surgeries & back pain has not impacted schooling. He does have occasional sleep problems, but often sleeps well.

- RECOMMENDATIONS:
  - Medications:
  - Continue diazepam (Valium®, Diastat®).
  - Therapies:
  - Psychology for relaxation therapy, feedback, stress management, coping skills, individual psychotherapy, family therapy.
  - Physical therapy for core strengthening, flexibility and non-impact aerobic exercise (tai chi, yoga, swimming).
  - Massage therapy for relaxation and pain management.
  - Improve sleep hygiene – education provided.
  - Accommodations:
  - Continue home schooling.

Past Month Illicit Drug Use among Persons Aged 12 or Older: 2012

- Illicit Drugs
- Marijuana
- Psychostimulants
- Cocaine
- Hallucinogens
- Inhalants
- Heroin

Results from the 2012 National Survey on Drug Use and Health: Summary of National Findings

In 2012, the specific illicit drug category with the largest number of recent initiates among persons aged 12 or older was marijuana use (2.4 million), followed by nonmedical use of pain relievers (1.9 million), then nonmedical use of tranquilizers (1.4 million), followed by Ecstasy use (0.9 million), then use of stimulants, cocaine, and inhalants (0.4 million to 0.7 million).

Results from the 2012 National Survey on Drug Use and Health: Summary of National Findings

Illicit Drug Dependence or Abuse in Past Year, by State: Percentages, Annual Averages Based on 2009 and 2010 NSDUHs

Youths Aged 12 to 17

Persons Aged 18 to 25

Illicit Drug Dependence in Past Year, by State: Percentages, Annual Averages Based on 2009 and 2010 NSDUHs

• Youths Aged 12 to 17

• Persons Aged 18 to 25
Findings from SAMHSA’s 2002 to 2010 National Surveys on Drug Use and Health (NSDUHs)

Monthly Variation in Substance Use Initiation among Adolescents

- First-time use of most substances peaks during the summer months of June and July
- On an average day in June, July, or December, more than 11,000 youths used alcohol for the first time
  - In other months, the daily average ranged from about 5,000 to 8,000 new users per day
- On an average day in June or July, more than 5,000 youths smoked cigarettes for the first time
  - In other months, the daily average ranged from about 3,000 to 4,000 new users per day
- On an average day in June or July, more than 4,800 youths used marijuana for the first time
  - Whereas the daily average ranged from about 3,000 to 4,000 in other months

Morbidity of Mental Health Disorders and Substance Abuse

- Prescription drug misuse in the past month
  - Persons with mental health disorders 11.9%
  - Person without mental health disorders 4%.

- Substance abuse with illicit drug
  - Persons with mental health disorders 25.2%
  - Persons without mental health disorder 11.8%

(SAMHSA, 2011)

DSM-V

- Cluster of cognitive, behavioral, and physiological symptoms indicating that the individual continues using the substance despite significant substance-related problems.
  - A problematic pattern of opioid use leading to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12-month period
Richardson, et al (2011)

- Looked at chronic pain and opioid use in teenagers
  - Adolescents with co-existing mental health disorders were two times more likely to be treated with chronic opioid for their chronic pain than without a mental health disorder.
  - The most common mental health disorders noted were anxiety and major depressive disorder.

Ethical Duties that Nurses Should Follow

“Evaluate and treat problems associated with unrelieved pain; Evaluate and treat problems associated with actual or potential risk of a substance use disorder or addiction; Practice without stigmatizing patients; Correct misconceptions in practice; and Advocate for holistic treatment of patients with pain and substance disorders”. (p. 174)


Risk factors for opioid abuse or misuse

- Demographics
- Pain Severity and Interference
- Psychosocial Factors
- Comorbid psychopathology
- Substance Use Disorder
- Drug Related Factors
- Genetic Factors
Risk factors identified as higher risk for substance use and mental health concerns

• Social history
• Drug, alcohol and tobacco use
  — Have you (or your friends) ever experimented with smoking?
  — Chewing tobacco?
  — Drinking alcohol? Taking drugs? Using anabolic steroids? Do you ever sniff, “huff,” or breathe anything to get high?
  — If the adolescent reports substance use, ask about duration, amount, and frequency.
  — If positive for any use teen version - CRAFFT
• Sexual history
  • Onset of age
  • Previous and current relationships
    — Male, female or both
    — Romantic breakdowns

Risk factors identified as higher risk for substance use and mental health concerns

• History of mental health concerns

• Past trauma history

Risk factors identified as higher risk for substance use and mental health concerns

• School
  — Grades
  — Missed school
  — Bullying
Risk factors identified as higher risk for substance use and mental health concerns

• Friends

• Family
  — Relationship with family members
  — Recent changes in family – divorce/separation, new family
  — Financial concern
  — Family history

Risk factors identified as higher risk for substance use and mental health concerns

• Personal stress
  — Health problems
  — Weight concerns

Steps Prior to Starting Opioids

• Opioids risk assessment
  — SOAPP
• Discuss opioid agreement
• Possible initial urine drug screen
• Monitor patient prescription history
  — OARRS
  — Risk Factor Stratification which included review of a 12 month period of time:
    • "age 18 to 24 years, male, 12 or more opioid prescriptions, opioid prescriptions from 3 or more pharmacies, early prescription opioid refills, escalating morphine dosages, psychiatric outpatient visits, hospital visits, diagnosed with non opioid substance abuse, depression, post-traumatic stress disorder and hepatitis." (Singal, Manchikanti, & Smith, 2012, p. ES74)
• Medication safety teaching
Screener and Opioid Assessment for Patients with Pain

- Drug Screen
  - Random drug screens are necessary
  - Different Drug Screens
    - Urine Drug Screens
      - Take 24 hours to get back
      - Tells specific drugs in urine
    - Urine Drug of Abuse
      - Quick drug screen should be followed up by send out
  - Drug Screen Blood

Opioid Agreement

- Agreement with the patient/family
  - Sets limits with controlled substances
  - Gives way to document expectations of patient and parent.
  - Not a legal binding agreement

Drug Screen

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How to look at OARRS Reports

Ohio Automated Rx Reporting System

Why do we need to think about safety for more than just the patient?

Among persons aged 12 or older in 2011-2012 who used pain relievers for non-medical reason in the past year, 54.0 percent got the pain relievers they most recently used from a friend or relative for free:

- Nearly 3 in 10 (27.7 percent) received them through a prescription from a doctor (which was higher than the 17.3 percent in 2009-2010).
- Another 10.0 percent bought them from a friend or relative. In addition, 4.2 percent took pain relievers from a friend or relative without asking.
- An annual average of 1.3 percent got pain relievers from a doctor or other provider; another 2.0 percent took pain relievers from a friend or relative without asking.
- 0.8 percent stole pain relievers from a doctor’s office, clinic, hospital, or pharmacy (which was higher than the 0.2 percent in 2009-2010).

Emergency Department Visits

- Emergency room visit increased one hundred-fifteen percent from 2004-2010 for prescription drug misuse and abuse according to the DAWN report in July 2012.
- Drug Take Back day in the community
  - safe way that unused medications can be wasted
  - mixing the medications with undesirable substances such as kitty litter or used coffee grounds.
**Medication Safety Information**

Document your teaching with the patient and family.

**Decision Making Tree**

<table>
<thead>
<tr>
<th>Low Risk Mental Health</th>
<th>No Mental Health Concerns</th>
<th>Low Risk Mental Health Concerns</th>
<th>High Risk Mental Health Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug Agreement</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Drug Screening</td>
<td>1-2 times/year</td>
<td>Every medical visit</td>
<td>Every medical visit</td>
</tr>
<tr>
<td>Lab and/or Report</td>
<td>Every medical visit</td>
<td>Every medical visit</td>
<td>Every medical visit</td>
</tr>
<tr>
<td>Follow-up</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Individualized Functioning Plan**

**GOALS**

**Physical**
- Decrease Pain
- Decrease Fatigue
- Increase Energy
- Increase Circulation
- Decrease nervous system instability
- Improve sleep quality
- Improve balance
- Improve flexibility
- Improve muscle strength
- Ability to perform 30 minutes of low-impact aerobic exercise 5x a week
- Ability to tolerate 30 minutes of ambulation

**Psychological**
- Improve mood - decrease frustration
- Improve mood - decrease anger
- Improve mood - decrease sadness
- Improve mood - decrease anxiety
- Absence of suicidal ideation/emotional upsets
- Increase range of coping strategies
- Broaden social support network
- Improve sleep hygiene
- Improve eating habits

**Scholastic**
- On-line school - participate 1 hours per day
- Home instruction - Tutor 1 hour per week
- Home instruction - Assignments 1 hour per day
- School attendance - ½-day attendance starting on 1 (date return)
- School attendance - Full-day attendance starting on 1 (date return)

**Social**
- In/Out -of-home family activity 1 times per week
- In-home peer activity 1 times per month
- Out-of-home peer activity 1 times per month
### Individualized Functioning Plan

#### Rules

**Patient Responsibilities:**
- Complete all homework and comply with physical therapy home exercise program. 1 day per week.
- Attend scheduled appointments.
- Complete all homework assignments.
- Provide feedback/rationale regarding medication effects and symptoms.
- Accept the consequences when choosing activities known to increase pain.

**Parent Responsibilities:**
- Discuss all about symptoms.
- Coach patient in completing homework assignments and following treatment plan and goals.
- Provide developmentally age-appropriate supervision of medication.
- Accept boundaries and ensure home environment.

#### Adolescent Medicine Clinic
- Toxidology physicians
- Social workers
- Inpatient chronic pain programs
- Local outpatient rehabilitation centers
- Local resident rehabilitation centers
QI data on patient SOAPP®-14Q scores

![Graph showing SOAPP 14Q scores]

QI data on patient SOAPP®-14Q scores

![Bar chart showing patients scored >9 SOAPP 14Q]

Urine Drug Screens versus Drug of Abuse Screening

- **Urine Drug Screen**
  - Send out test for us
  - Takes 1 day to get back
  - Unsupervised collection
  - Comprehensive breakdown of all drugs in the urine
- **Drug of Abuse**
  - Quick turnaround
  - Give positive for classes of medications
  - Our test is not always reliable for all types of opioids
  - Can't determine if taking other medications in the same class
Gaps in literature for assessments of opioid risk assessment tool for adolescents

- We do not have a good opioid risk assessment tool for adolescents.
- Are there certain questions specific to adolescents that would put them at higher risk?
- How do we utilize the risk factors obtained to safe guard our adolescents?

Case Presentation Review

**SOAPP® 14Q – Score 33**

0 = Never, 1 = Seldom, 2 = Sometimes, 3 = Often, 4 = Very Often

1. How often do you have mood swings? 4
2. How often do you make a mistake while driving or on the job? 2
3. How often do you get into arguments with others? 3
4. How often have you had a fight with someone? 4
5. Have you ever been arrested for a drug or alcohol offense? 3
6. How often have you run out of your prescription? 1
7. How long have you used this medication for? 3
8. How often do you feel high or out of control? 2
9. How often do you have withdrawal symptoms? 4
10. How often do you have cravings? 1
11. How often do you think about using drugs or alcohol? 3
12. How often do you feel like you need to use drugs or alcohol to feel normal? 2

13. How often do you feel sad? 3
14. How often do you feel angry? 1

**Case Presentation Review**

1/6/2011
- SOAPP – High Risk
- June 2011
  - He states he smoked his last smoke last week. Taking Valium at night which only helps him sleep however he complains of increased anger problems with anger outburst. He is asking for assistance with this.
  - Referred to psychiatry
- November 2011
  - He states he has been out of work for the past few weeks due to medication issues. He is currently on medical leave from work. He continues to use Opiates including fentanyl patches, however he continues to feel ill due to his medication issues. He is referred to psychiatry for assistance with this.
- April 2013
  - Admitted for SOB
  - May 1, 2013
    - Good
  - May 21, 2013
    - Admitted with vomiting, diarrhea, breathing difficulties
- June 4, 2013
  - Positive UDS
- Referred to Adolescent Medicine for Opioid Abuse

**Drug Screen**

**Case Presentation Review**

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**Drug Screen**
Past Year Perceived Need for and Effort Made to Receive Specialty Treatment among Persons Aged 12 or Older Needing But Not Receiving Treatment for Illicit Drug or Alcohol Use: 2012

- Did Not Feel They Needed Treatment: 84.6%
- Full They Needed Treatment and Did Not Make an Effort: 10.8%
- Full They Needed Treatment and Did Make an Effort: 1.7%
- Did Not Feel They Needed Treatment and Did Make an Effort: 0.7%


Reasons for Not Receiving Substance Use Treatment among Persons Aged 12 or Older Who Needed and Made an Effort to Get Treatment But Did Not Receive Treatment and Felt They Needed Treatment: 2009-2012 Combined

- No Health Coverage and Could Not Afford Cost: 36.0%
- Not Ready to Stop Using: 16.1%
- Had Health Coverage But Did Not Cover Treatment or Did Not Cover Cost: 9.0%
- Might Have Negative Effect on Job: 8.9%
- Did Not Know Where to Go for Treatment: 8.2%
- No Transportation/Inconvenience: 7.6%
- Might Cause Neighbors/Community to Have Negative Opinion: 7.1%
- Did Not Have Time: 4.1%

Prevalence data on clients who received publicly funded addiction treatment during 2012 in Ohio

- Clients Age 17 & Under: Total Number = 6,614
  - Alcohol: 11.8%
  - Other Drugs: 5.8%
  - Nonspecific Other Diagnosis: 4.1%

- Clients Age 18 & Over: Total Number = 86,918
  - Alcohol: 32.0%
  - Nonspecific Other Diagnosis: 7.1%
  - Other Drugs: 2.3%

Take Home Points

• Kids in chronic pain are at high risk of opioid abuse especially if they’ve played with other drugs or if they’ve got mental health problems.
• We have some good tools to help assess risks but they are not perfect.
• We got some good tools to manage that risk and help us prevent drug abuse or catch it early.
• Please use these tools and a contract and please prescribe carefully.

Questions?

Tired of listening?

References

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