The SBIRT Residency Training Program in Pediatrics

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SBIRT:

_GScreening,
_Brief
_IIntervention,
_Referral to
_TTreatment

For Alcohol and Illicit Substance Use
Scope of Substance Abuse

♦ Major preventable and treatable public health problem
  – Total annual economic costs to U.S estimated at >$414 billion.
  – Consequences to individual, workplace, society, healthcare system

♦ Situation in CT
  – Top 20% for past year alcohol and illicit drug dependence in 12yrs + (8.5%), and 18-25 yrs (23.1%)
  – Top 20% for binge drinking among 12-17 yrs (11.9%)
  – Top 20% for marijuana, cocaine, and Rx pain drugs among 18-25 yrs (15.2%)

CDC data, Behavioral Risk Factor Surveillance System, 2006
Substance Use Trends Among Adolescents

- After increase in early 1990s, adolescent SA has decreased steadily
  - “Record lows” for 12 graders - alcohol (45% past month use) and cigarettes (22%)
- One in four 12th graders report binge drinking in past month, 40% college age
- Marijuana most commonly used illicit substance among teens and young adults
- Rates of alcohol and cigarette use more than triple in 18-25 yrs versus 12-17 yrs
National Prevalence Data – High school seniors, 2005

- Alcohol 76.8%
- Cigarettes 52.8%
- Any illicit substance 51.1%
- Marijuana 45.7%
- Amphetamines 7.5%
- Methamphetamines 6.2%
- Inhalants 10.9%
- Tranquilizers 10.6%
- Hallucinogens 9.7%
- Cocaine 8.1%
- MDMA 7.5%
- Steroids 3.4%
- Heroin 1.5%
- Narcotics (other than heroin) 13.5%

Monitoring the Future Study, U, Michigan, 2005 data
Young Adults

♦ Highest prevalence of alcohol consumption

♦ Major concern for college campuses

♦ Drivers between the ages of 16-25 account for 30% of alcohol-related fatalities
Consequences of Drug and Alcohol Use

♦ Morbidity
  – Impairment of judgment
    • Effect on brain development; hippocampus?
  – Direct medical effects
  – Association with other high risk behaviors
    • STIs, HIV, pregnancy
    • Violence and aggression
    • Risky recreational vehicle use; injuries

♦ Mortality - injuries
Leading Causes of Mortality, Ages 15-19 years, National 2005 data

- **Malignancies**: 5.50%
- **Homicide**: 14.10%
- **Suicide**: 12.00%
- **Unintentional Injuries**: 11.10%
- **MVAs**: 38.70%
- **Other Unintentional Injuries**: 18.60%
Drug and Alcohol Dependence

- Pediatric rates lower than subclinical use/problem use
- National Rates of Abuse/Dependence on Alcohol or Illicit Drugs*
  - 12-17 year olds - 8% M=F
  - 18-25 year olds - 17% F, 26% M
- Knight - clinical sample in Boston, MA
  - 16.3% of 14-18 yo had substance-related diagnosis of abuse or dependence, defined by DSM-IV.**

Definitions - based on DSM IV, NIAAA

♦ Low risk use/experimental use
  • Not affecting health
  • Use < NIAAA guidelines for ETOH

♦ Hazardous use/Regular use
  • At risk for injury/medical or social problems
  • Use > NIAAA guidelines

♦ Harmful Use
  • Problem use - Currently experiencing problems
  • Abuse - using despite harm
  • Use >> NIAAA guidelines

♦ Dependence/Addiction
  • Out-of-control use, experiencing withdrawal symptoms
Physician Behaviors

- Despite AMA and AAP recommendations:
  - Less than 50% pediatricians report screening all teens for substance use/abuse
  - Less than 25% report screening for drinking and driving in teens*
  - Barriers reported:
    - “not a problem in my practice population
    - Inadequate training
    - Lack of effective treatment programs or referral sites

- Physicians often fail to detect/refer
  - Nationally, 11% of 23.6 million estimated to need SA treatment actually received care**

BI as a Response Option

Primary Prevention

Brief Intervention

AODA Treatment

Abstinence  Infrequent use  Subclinical use  Abuse  Dependence
Nation’s Public Health Agenda: Healthy People 2010

♦ Increase the proportion of persons who are referred for follow-up care for alcohol problems, drug problems, or suicide attempts after diagnosis or treatment for one of these problems in the emergency department.
Alcohol Screening and the Brief Negotiated Intervention (BNI).
What is it & Does it Work?
Several Truths

♦ Treatment does work
♦ The ED/Primary care visit is an opportunity for intervention
♦ Timely referral is effective
♦ Practitioners are reluctant to screen and intervene
♦ There are multiple barriers to the SBI
Why **Early** intervention?

- Screening and referral increases treatment contact
- $ saved
- Improved prognosis
- Medical opportunity is ‘Teachable Moment’
UNIVERSAL SCREENING WIDENS THE NET

ABSTAINERS & MILD DRINKERS (70%)

MODERATE (20%) at risk drinkers

SEVERE (10%)

Primary Prevention

Brief Intervention

Specialized Treatment
Brief Negotiation Interventions

♦ Extensive experience by Yale Adult ED faculty - nationally and at Yale
  – BNI taught in context of comprehensive program can improve ED resident knowledge and practice*
  – Feasibility studies of BNI (7.5’) in ED settings for harmful ETOH use - D’Onofrio**
  – Developed Project ASSERT - using BNI to facilitate linkages to community referrals for substance abuse

Brief Negotiation Interventions

- Data on efficacy of BNI in various settings
  - Bernstein - Project ASSERT in Walk-in clinics - found reduced rates of cocaine, heroin use at 6 months*
  - Data in ED settings mixed-
    - D’Onofrio - no difference between BNI and Discharge instructions on ETOH use at 12 months**

COST-BENEFIT ANALYSIS OF BRIEF MOTIVATION

- RCT (n=774)
- primary care practice, managed care setting
- problem drinkers
- economic cost of intervention = $80,210 ($205 each)
- economic benefit of intervention = $423,519
  - $193,448 in ED and hospital use
  - $228,071 avoided costs in motor vehicle crashes and crime
  - 5.6 to 1 benefit to cost ratio
  - $6 savings for every $ invested

World Health Organization  
(Am J Pub Health 1996)  

“A cross-national trial of brief interventions with heavy drinkers”
– Multinational study in 10 countries (n=1,260)
– Interventions included simple advice, brief & extended counseling compared to control group
– Results: Consumption decreased:
  • 21% with 5 minutes advice, 27% with 15 minutes compared to 7% controls
  • Significant effect for all interventions
Why SBIRT/BNI with adolescents?

- A large population of “subclinical” AOD users exists
- Only 1 in 20 with clinical AOD involvement get services
- Primary care offers an “opportunistic” setting
- Expands service options, typically limited
- MI techniques congruent with aspects of adolescent development
  - Respect for autonomy, emerging independence
- It seems to work
Effectiveness of BNI in Teens

– Small, but growing literature
– Many “brief” programs extensive, not brief
– Outcomes: decreased AOD use, consequences, increased self-efficacy
  • D’Amico - RCT, 15’ intervention with 12-18 year olds in primary care clinic
  • Decreased MJ use at 3 month f/u*
– High satisfaction overall

Ok, What is the Brief Negotiated Interview & How do I perform this technique?
BNI: Brief Negotiated Intervention

- Short (5-7 min) counseling sessions
- Based on motivational interviewing techniques - patient-centered, assist in changing specific drinking/drug-using habits, use of reflective listening
- 4 Major Steps
  - Raise the subject
  - Provide feedback
  - Enhance motivation/develop discrepancy
  - Negotiate and advise
- Scripted
  - Manual developed for explanation of each step
Components of the BNI

1. Raise the Subject
2. Provide Feedback
3. Enhance Motivation
4. Negotiate and Advise
Step 1: Raise The Subject

- Establish Rapport
- Raise the subject of alcohol use

“Hello, I am ...... Would you mind taking a few minutes to talk with me about your alcohol use?”
Establish Rapport

♦ To understand the patient’s concerns and circumstances

♦ To explain the providers concern/role

♦ To avoid a judgmental stance
Raise the subject

♦ Get the patient’s agreement to talk about the alcohol or drug use

♦ Talk about the pros and cons of their use/abuse

♦ Re-state what they have said regarding the pros and cons
What if the patient does not want to talk about their use/abuse?

“Okay, I see you aren’t ready to talk about this today. Remember that we are here 24/7 if you change your mind”
ASK Current Drinkers

• On average, how many days per week do you drink alcohol?
• On a typical day when you drink, how many drinks do you have?
• What’s the maximum number of drinks you had on a given occasion in the last month?
# Screen Positive

<table>
<thead>
<tr>
<th></th>
<th>Drinks per week</th>
<th>Drinks per occasion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Men</strong></td>
<td>&gt; 14</td>
<td>&gt; 4</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td>&gt; 7</td>
<td>&gt; 3</td>
</tr>
<tr>
<td><strong>All Age &gt;65</strong></td>
<td>&gt; 7</td>
<td>&gt; 3</td>
</tr>
</tbody>
</table>
### Drinking Patterns

<table>
<thead>
<tr>
<th></th>
<th>% of US adults aged 18+</th>
<th>Abuse without dependence</th>
<th>Dependence with or without abuse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exceeds daily limit &lt; once a week</td>
<td>16%</td>
<td>1 in 8 (12%)</td>
<td>1 in 20 (5%)</td>
</tr>
<tr>
<td>Exceeds daily limit once a week or more</td>
<td>3%</td>
<td>1 in 5 (19%)</td>
<td>1 in 8 (12%)</td>
</tr>
<tr>
<td>Exceeds both weekly &amp; daily limits</td>
<td>9%</td>
<td>1 in 5 (19)</td>
<td>1 in 4 (28)</td>
</tr>
</tbody>
</table>

Source: NIAAA National Epidemiologic Survey on Alcohol and Related Conditions, 2003
Screening Questions - CRAFFT

- **CRAFFT Screening**

  Have you ever ridden in a **CAR** by someone (including yourself) who was high or was 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 that you did while using alcohol or drugs?
  
  Have you gotten in **TROUBLE** while you were using alcohol or drugs?

  alpha - .68; sensitivity .80; specificity .86 - to predict any problem; PP+ .83; PP- .91

  Knight, J. et.al. 2002.
ASK Current Drinkers

CAGE

C → Cut Down
A → Annoyed
G → Guilty
E → Eye Opener
Step 2: Provide Feedback

- Review patient’s drinking patterns
- Make connection to ED visit or other aspects of if possible
- Compare to National Norms and offer NIAAA guidelines
Step 2: Provide Feedback

“From what I understand you are drinking…”

“What connection (if any) do you see between your drinking and this ED visit?”

“These are what we consider to be the upper limits of low-risk drinking for your age and sex. By low-risk we mean that you would be less likely to experience illness or injury.”
Express Empathy and Rapport

- Attitude: Acceptance by provider
- Technique: Skillful reflective listening
- Basis of change: Patient ambivalence
Assess Readiness To Change

“On a scale of 1-10 (1 being not ready and 10 being very ready) how ready are you to change any aspect of your drinking patterns?”
Step 3: Enhance Motivation

On a scale from 1-10, how ready are you to change any aspect of your drinking?

If patient indicates:

$\geq 2$ : “Why did you choose that number and not a lower one? What are some reasons that you are thinking about changing.”

$\leq 1$ : “Have you ever done anything that you wish you hadn’t while drinking: What would make this a problem for you.” Discuss pros and cons
Not Ready for Change

♦ Don’t
  – Use shame or blame
  – Preach
  – Label
  – Stereotype
  – Confront
Avoid Argumentation

♦ Counter productive
♦ Defending breeds defensiveness
♦ Perceptions can be shifted
♦ Labeling is unnecessary
♦ Resistance is a signal to change strategies
  – Rolling with resistance
Not Ready for change

♦ Do
  – Offer information, support and further contact
  – Present feedback and concerns, if permitted
  – Negotiate: “What would it take you to consider a change?”
Unsure Patients

♦ Don’t
  – Jump ahead
  – Give advice
  – Expect argument about change

♦ Do
  – Explore pros & cons
  – “help me to understand what alcohol does for you”
  – “Are there things you don’t like about your alcohol use?”
Step 4: Negotiate and Advise

- Elicit response
  “How does all this sound to you?”

- Negotiate a goal
  “What would you like to do?”

- Give advice
  “It is never safe to drink and drive, etc…”

- Summarize
  “This is what I heard you say.. Thank you… (Provide PCP f/u or treatment referral)
Develop Discrepancy
Explore Pros and Cons

- Patient awareness of situation

- Discrepancy between present behavior and important goals as change motivator

- Let the patient name the problem and the pros and cons
Dangerous Assumptions

♦ This person ought to change
♦ This person is ready to change
♦ This person’s health is the prime motivating factor for them
♦ If they decide not to change the BNI has failed
Dangerous Assumptions

♦ Patients are either motivated or not
♦ Now is the right time to change
♦ A tough approach is best
♦ I am the expert and they should follow my advice
Help the patient to:

- Name a solution for themselves
- Choose a course of action
- Decide how to achieve it
- Encourage patient choice
Referral

- Consult the
  - Social worker
  - Psychiatric services

- Discharge sheet of possible centers and/or programs and information
Summary

♦ Alcohol problems are common, identifiable and treatable disorders

♦ Knowledge and skills for screening and intervention can be learned
Short-term Components

♦ Expanded curriculum
  – Topics adapted for each specialty
    • Substance-induced medical problems, intoxication, withdrawal, treatment of addiction, pain management, psychiatric complications

♦ Website
  – modules, didactic presentations, video clips, case studies, readings
Long-term Components

“Virtual coach”
- Automated clinical skills testing and training
- Individualized practice and reinforcement
- 3-4 Virtual SPs
  - Give personalized feedback, praise, constructive feedback, award points for correct steps
- Integration of curricular elements into residency program
- Sustainability through “train the trainer”
- Dissemination throughout CT
Remember:

Just start the conversation, you may save a life!