Promising Programs for Youth Affected by Opioid Use

Sarah M. Bagley, M.D., MSc.
Assistant Professor of Medicine and Pediatrics
Director, CATALYST Program
Boston University School of Medicine/Boston Medical Center

September 17, 2019
Disclosures

NIDA Career Development Award 1K23DA044324-01
Jack Satter Foundation
MA Department of Public Health
Department of Medicine Career Investment Award
Learning Objectives

- Update on the epidemic among young adults
- Profile innovative programs available to youth in the US
Opioid Epidemic Among Youth
Opioid use among young adults

Heroin: Trends in Annual Use, Risk, Disapproval, and Availability

**Figure 29. Past Year Heroin Use among People Aged 12 or Older, by Age Group: Percentages, 2002-2016**
Opioid poisonings

Hospitalizations for Prescription Opioid Poisonings Stratified by Age Category

Pediatric hospitalizations for opioid poisonings increased nearly 2-fold from 1997 to 2012

Overdose deaths involving all drugs

Young Adults (15-24 year olds)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Overdose Deaths</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>1,500</td>
<td>700</td>
<td>800</td>
</tr>
<tr>
<td>2000</td>
<td>2,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>2001</td>
<td>2,500</td>
<td>1,250</td>
<td>1,250</td>
</tr>
<tr>
<td>2002</td>
<td>3,000</td>
<td>1,500</td>
<td>1,500</td>
</tr>
<tr>
<td>2003</td>
<td>3,500</td>
<td>1,750</td>
<td>1,750</td>
</tr>
<tr>
<td>2004</td>
<td>4,000</td>
<td>2,000</td>
<td>2,000</td>
</tr>
<tr>
<td>2005</td>
<td>4,500</td>
<td>2,250</td>
<td>2,250</td>
</tr>
<tr>
<td>2006</td>
<td>5,000</td>
<td>2,500</td>
<td>2,500</td>
</tr>
<tr>
<td>2007</td>
<td>5,500</td>
<td>2,750</td>
<td>2,750</td>
</tr>
<tr>
<td>2008</td>
<td>6,000</td>
<td>3,000</td>
<td>3,000</td>
</tr>
<tr>
<td>2009</td>
<td>6,500</td>
<td>3,250</td>
<td>3,250</td>
</tr>
<tr>
<td>2010</td>
<td>7,000</td>
<td>3,500</td>
<td>3,500</td>
</tr>
<tr>
<td>2011</td>
<td>7,500</td>
<td>3,750</td>
<td>3,750</td>
</tr>
<tr>
<td>2012</td>
<td>8,000</td>
<td>4,000</td>
<td>4,000</td>
</tr>
<tr>
<td>2013</td>
<td>8,500</td>
<td>4,250</td>
<td>4,250</td>
</tr>
<tr>
<td>2014</td>
<td>9,000</td>
<td>4,500</td>
<td>4,500</td>
</tr>
<tr>
<td>2015</td>
<td>9,500</td>
<td>4,750</td>
<td>4,750</td>
</tr>
<tr>
<td>2016</td>
<td>10,000</td>
<td>5,000</td>
<td>5,000</td>
</tr>
<tr>
<td>2017</td>
<td>10,500</td>
<td>5,250</td>
<td>5,250</td>
</tr>
</tbody>
</table>

Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2017 on CDC WONDER Online Database, released December, 2018
Type of drugs involved in overdose


Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2017 on CDC WONDER Online Database, released December, 2018
Overdose deaths involving opioids


- Prescription Opioids
- Heroin
- Heroin AND Other Synthetic Narcotics
- Other Synthetic Narcotics (fentanyl)

Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2017 on CDC WONDER Online Database, released December, 2018
Significant increase in deaths and opioid use disorder

9.4% increase of all deaths attributed to opioids among 15-24 yo

From 2013 to 2014, 42% increase in prevalence of opioid use disorder among 11-29 yo in MA

Gomes T et al. JAMA, 2018
Barocos J, AJPH, 2019
Access to medication treatment

Availability of services for adolescents is limited: fewer than 1 in 3 specialty drug treatment programs in the United States offers care to adolescents.

From 2000 to 2014 only 1 in 4 youth diagnosed with OUD received medication (buprenorphine or naltrexone) within 6 months of diagnosis.
Retention in medication treatment

Only 4.7% of adolescents younger than 18 years and 26.9% of young adults 18+ received timely OUD medications. Medications independently associated with lower attrition from treatment compared to behavioral health services alone.

Early intervention creates opportunities

- Risk of developing a substance use disorder is linearly correlated with age of initiation
- Children who initiate drinking before age 14 are ~5 times more likely to develop an alcohol use disorder compared with those who initiate at age 19
- Brief, early interventions in the context of usual medical care work

Addressing SU early

- Prevent long-term complications of substance use
- Prevent short-term consequences of substance use
- Decrease toxicity to developing brain
- Help youth realize their potential and achieve their goals

Levy, 2019; Hingson, Heeren, Winter, 2006; Casey, Jones, Hare, 2008
Innovative Programs for Youth
Recovery High Schools

Schools specifically designed for students recovering from substance use

Finch et al (2017): Adolescents attending recovery schools were significantly more likely to report complete abstinence at the 6-month follow-up

Finch et al. 2017 (Am J Drug Alcohol Abuse)
http://www.massrecoveryhs.org/home
Collegiate Recovery Programs

College or University-provided, supportive environment that engages students for continued recovery from substance use

Educational opportunity alongside recovery support

Drop-in center at Minneapolis Community and Technical College: Licensed counselor and work-study students available on-site

https://collegiaterecovery.org/
https://www.minneapolis.edu/student-services/support-services/collegiate-recovery-program
12 randomized control trials have found:

**PARENTS REPORTED**
- Increased family unity
- Increased positive communication
- Increased positive parenting skills
- Improved family management and organization
- Improved parent/child relationship
- Decreased family conflict

**CHILDREN EXPERIENCED**
- Increased social skills, cooperation and pro-social friends
- Improved school performance
- Reduced misconduct and aggression
- Reduced depression and anxiety
- Dramatically reduced tobacco, alcohol and drug abuse use

- Designed to encourage happier family relationships, improve mental health outcomes, decrease youth alcohol and drug use
- 7- to 14-week skills courses with individual and family sessions
- Adapted in all 50 states and 36 countries
LifeSkills Training

Available for elementary, middle, and high school ages

Typically combine training in self-management skills, social skills, and substance use resistance skills

Particular Prescription Drug Abuse Prevention Module
PROSPER (Promoting School-community-university Partnerships to Enhance Resilience)

NIDA-funded trial in 14 Iowa and Pennsylvania communities that chose among a menu of intervention options for their 7th grade students

Considered LifeSkills Training, Project Alert, and All Stars in conjunction with the Strengthening Families Program

Crowley et al (2014) Preventive Medicine

The Phoenix

Sober active community: provides fitness programs, facilitated by instructors in recovery themselves

Membership fee: 48 hours of sobriety
Bridge Over Troubled Waters

Offers street outreach, mobile medical van, runaway hotline, counseling and support, education and career development

Daily “foot patrol”

Mobile Medical Van: provides medical attention, survival kits, clothes, food, and referrals

Operates independent housing for young adults and emergency youth shelter, Warming Center

https://www.bridgeotw.org/programs
Familias Unidas

Substance use and sexual risk behavior prevention intervention for Hispanic youth and families

Targets risk and protective factors

Led by a trained facilitator through 8 multi-parent groups and 4 family sessions

http://familias-unidas.info/

Youth Clubhouses

Community-based havens that provide peer-driven support services in a non-clinical setting

Homework help and tutoring, sports and fitness, community service, group entertainment and peer mentoring

https://for-ny.org/youth-clubhouses/
Statewide social marking campaign to encourage conversations between parents and teens around substance use and abuse

Drug abuse prevention organization that seeks to empower teens to make healthy choices

Collaboration with Partnership for Drug-Free Kids and Colorado Meth Project

https://www.riseaboveco.org/
https://www.speaknowcolorado.org/
CATALYST Clinic at Boston Medical Center

- Opened 6/2016 in response to gap in addiction treatment services for adolescents and young adults at BMC
- Co-located in Adolescent Center and Adult Primary Care
- Integrated, comprehensive care team
  - **Clinical/medical:** Medical Director, Adolescent Physician, Addiction Nurse Care Manager
  - **Behavioral health:** Licensed Independent Clinical Social Worker (LICSW), Licensed Clinical Social Worker (LCSW), Addiction Psychiatrist
  - **Recovery support:** Two recovery coaches
  - **Administrative:** Program Manager and Coordinator
Start Talking

Tools to start conversations between parents, educators, community leaders, and youth about living healthy lives

HOPE: K-12 curriculum developed for schools including lessons, assessments, and learning materials to develop functional knowledge, attitudes, and necessary skills to prevent drug abuse

5 Minutes for Life: Ohio State Troopers, Ohio National Guard members and local law enforcement offer 5 minute presentations encouraging responsible decision-making, leadership, and encouraging drug-free lifestyles

https://www.starttalking.ohio.gov/
Michigan Youth Treatment Infrastructure Enhancement (MYTIE)

Initiative to guide development of effective continuum of care for transitional aged youth (16-21 years old) and their guardians

Increase service and treatment access, establish partnerships, identify disparities and barriers that affect access to treatment

https://www.michigan.gov/mdhhs/0,5885,7-339-71550_2941_4871_4877_77211---,00.html
 Teens Linked to Care (TLC)

Develop a framework for schools to address HIV, STD, teen pregnancy, high-risk substance use through education, primary prevention, and early detection screening in 3 pilot rural communities: Indiana, Kentucky, Ohio

Implementation of program activities through Youth Advisory Boards (YAB) and Community Advisory Boards (CAB)

https://www.cdc.gov/healthyyouth/substance-use/teens_linked_to_care.htm
Operation Prevention

DEA and Discovery Education initiative to create a comprehensive, no-cost program for opioid misuse

Includes virtual field trips, parent resources

Operation Prevention Video Challenge

https://www.operationprevention.com/
Opioid Affected Youth Initiative (OAYI)

US Department of Justice initiative in Miami-Dade County to develop data-driven, coordinated responses to address opioid use among youth under 25 years old

Thanks to Samantha Schoenberger for assistance in putting together this presentation