BEHAVIORAL HEALTH AND TOBACCO CESSATION

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Tobacco Use Burden on Indiana

• 11,100 deaths/annually
• More than 1 in 5 adults smoke (20.6%-2015)
• For every death, two new youth start and 20 are living with a chronic disease
• Nearly $3 billion in annual health care costs
• $487 million in Medicaid costs
• Indiana taxpayers pay $903 per household to treat tobacco-related disease
• For every pack of cigarettes sold in Indiana, it spends $15.90 in health care costs related to tobacco
Tobacco Use and Mental Health

• About 1 in 5 adults in the U.S. (19.9%) and in Indiana (22.3%) have any mental illness

• In both Indiana and the United States, adults with mental illness smoke at higher rates than adults without mental illness

• Over 1 in 3 adults with mental illness in Indiana (38.8%) and the U.S. (36.1%) smoked cigarettes in 2009-2011

• Individuals with mental illness or substance use disorder smoke nearly 40% of all cigarettes smoked in the United States
Indiana Tobacco Quitline (ITQL)

- The Indiana Tobacco Quitline is a free cessation counseling service that helps Indiana smokers quit tobacco.

- This phone-based one-on-one coaching offers tobacco users who have decided to quit help through the process to quit for life.
Review of Services

- Telephone counseling
- Text program option
- Web based program
- 2 weeks medication (if eligible)
- Tailored, evidence-based, confidential
- Available to anyone age 13 and older
- Extra support for pregnant women
Methods of Referral to Indiana Tobacco Quitline

• Brief Intervention
  • Ask, Advise, Refer

• Fax Referral Form
  • Enroll in Preferred Network at QuitNowIndiana.com

• Online Referral Portal
  • QuitNowReferral.com
National and State Media Campaigns

Rebecca

“I quit smoking and I got care for my depression.”
TOBACCO IN MENTAL HEALTH & ADDICTION RECOVERY
Bringing Indiana Along

• Funded by the Indiana State Department of Health, Tobacco Prevention & Cessation Commission (Statewide)

• Aim: to bring tobacco awareness to the field of behavioral health and assist systems with integrating evidence-based tobacco treatment

• Offer: FREE
  • Policy Development & Implementation Technical Assistance
  • Tobacco Treatment Integration Technical Assistance
  • Trainings for staff
Fact #1: Smoking Rates are Higher

• Americans with mental illnesses have a 70% greater likelihood of smoking than the those among the general population (CDC)

• It has been estimated that 30-40% of all cigarettes consumed in the US are smoked by people with mental health conditions
Fact #2: Disproportionately Higher Rates of Disease

- Higher rates of smoking translate to higher rates of smoking-related diseases
- Increased coronary heart disease largely smoking related (remains when controlled for weight/bmi) \textit{goff 2005}
- Increased mortality rates (above general population)
  - Cardiovascular disease \(2.3 \times\)
  - Respiratory disease \(3.2 \times\)
  - Cancer \(3.0 \times\)
- Those with SMI experience 25 years less life expectancy than those of general population

Brown 2000; Davidson 2001; Allison 1999; Dixon 1999; Herran2000
Sadly

• Despite the heavy disease burden, tobacco dependence treatment had not been routinely integrated into mental health and addiction treatment.

• While smoking rates in the general population have significantly declined, smoking rates among adults with serious psychological distress (SPD) has not declined since 1997.
Current Smoking among Adults Aged 18 or Older, by Past Month Serious Psychological Distress Status: NHIS, 1997 to 2011

* Difference between estimate and estimate for 2011 is statistically significant at the .05 level.

SAMHSA, Center for Behavioral Health Statistics & Quality, July 2013
Tobacco Use is Primary Cause of death among individuals with MHD/SUD

Tobacco use was the cause of death in 51% of alcoholics who completed inpatient treatment examined over a 20-year period post treatment.
Hurt et al. 1996

Among males with heroin addiction, tobacco use was responsible for more deaths than accidental drug poisoning/overdose, suicide/homicide/accidents, and chronic liver disease examined over a 33-year period.
Hser et al. 2001

Fact #3: Smoking Worsens Mental Illness

- Smokers diagnosed with schizophrenia are generally more psychotic and have a greater number of hospitalizations than nonsmokers diagnosed with schizophrenia. (Tang Y, et al. *Journal of Psychiatric Research* 2007; 41(1-2): 43-48)

- Smokers with panic disorder report more severe and intense anxiety symptoms when compared with nonsmokers with panic disorder. (Zvolensky, M et al. *Journal of Anxiety Disorders* 2003; 17(4): 447-460)
Serious Implications

- Tobacco use is strongly associated with dependence on and abuse of alcohol, marijuana, and other substances. (Martinez-Ortega, J et al. Addictive Behaviors 2005; 31(9): 1722-1729.)

- Smoking is a predictor of greater problem severity and poorer treatment responses in individuals undergoing outpatient substance use treatment. (Vanable PA, Carey MP, Carey KB, et al. Psychol Addict Behav. 2003;17:259-265)

- Smoking (tar) impacts metabolism of many medications resulting in 2-3 X increased dosage.
<table>
<thead>
<tr>
<th>Medications Known or Suspected To Have Their Levels Affected by Smoking and Smoking Cessation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ANTIPSYCHOTICS</strong></td>
</tr>
<tr>
<td>Chlorpromazine (Thorazine)</td>
</tr>
<tr>
<td>Clozapine (Clozaril)</td>
</tr>
<tr>
<td>Fluphenazine (Permitil)</td>
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<tr>
<td>Haloperidol (Haldol)</td>
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<tr>
<td>Mesoridazine (Serentil)</td>
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<tr>
<td>Olanzapine (Zyprexa)</td>
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<tr>
<td>Thiothixene (Navane)</td>
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<tr>
<td>Trifluoperazine (Stelazine)</td>
</tr>
<tr>
<td>Ziprasidone (Geodon)</td>
</tr>
<tr>
<td><strong>ANTIDEPRESSANTS</strong></td>
</tr>
<tr>
<td>Amitriptyline (Elavil)</td>
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<tr>
<td>Clomipramine (Anafranil)</td>
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<tr>
<td>Desipramine (Norpramin)</td>
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<tr>
<td>Doxepin (Sinequan)</td>
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<tr>
<td>Duloxetine (Cymbalta)</td>
</tr>
<tr>
<td>Fluvoxamine (Luvox)</td>
</tr>
<tr>
<td>Imipramine (Tofranil)</td>
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<tr>
<td>Mirtazapine (Remeron)</td>
</tr>
<tr>
<td>Nortriptyline (Pamelor)</td>
</tr>
<tr>
<td>Trazodone (Desyrel)</td>
</tr>
<tr>
<td><strong>MOOD STABILIZERS</strong></td>
</tr>
<tr>
<td>Carbamazepine (Tegretol)</td>
</tr>
<tr>
<td><strong>ANXIOLYRICS</strong></td>
</tr>
<tr>
<td>Alprazolam (Xanax)</td>
</tr>
<tr>
<td>Diazepam (Valium)</td>
</tr>
<tr>
<td>Lorazepam (Ativan)</td>
</tr>
<tr>
<td>Oxazepam (Serax)</td>
</tr>
<tr>
<td><strong>OTHERS</strong></td>
</tr>
<tr>
<td>Acetaminophen</td>
</tr>
<tr>
<td>Caffeine</td>
</tr>
<tr>
<td>Heparin</td>
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<tr>
<td>Insulin</td>
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<tr>
<td>Rasagiline (Azilect)</td>
</tr>
<tr>
<td>Riluzole (Rilutek)</td>
</tr>
<tr>
<td>Ropinirole (Requip)</td>
</tr>
<tr>
<td>Tacrine</td>
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<tr>
<td>Warfarin</td>
</tr>
</tbody>
</table>
Fact #4: Quitting does not Interfere with recovery

• As a matter of fact quitting has been found to:
  
  • Reduce symptoms of mental health conditions such as depression and anxiety

  • Decrease hospitalizations & suicidal behavior
Improved Mental Health with Quitting Smoking

- Meta-analysis 26 studies (14 gen pop, 4 psychiatric, 3 physical conditions, 2 psychiatric or physical, 2 pregnant, 1 post-op)

Table 1 | Effect of smoking cessation on mental health. Sensitivity analysis after removal of studies of low quality (medium-low scores on Newcastle-Ottawa scale)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>No of studies included</th>
<th>No of studies excluded</th>
<th>Effect estimate</th>
<th>Original effect estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>4</td>
<td>0</td>
<td>-0.37 (-0.70 to -0.03)</td>
<td>-0.37 (-0.70 to -0.03)</td>
</tr>
<tr>
<td>Depression</td>
<td>9</td>
<td>1</td>
<td>-0.29 (-0.42 to -0.15)</td>
<td>-0.25 (-0.37 to -0.12)</td>
</tr>
<tr>
<td>Mixed anxiety and depression</td>
<td>4</td>
<td>1</td>
<td>-0.36 (-0.58 to -0.14)</td>
<td>-0.31 (-0.47 to -0.14)</td>
</tr>
<tr>
<td>Psychological quality of life</td>
<td>4</td>
<td>4</td>
<td>0.17 (-0.02 to 0.35)</td>
<td>0.22 (0.09 to 0.36)</td>
</tr>
<tr>
<td>Positive affect</td>
<td>1</td>
<td>2</td>
<td>0.68 (0.24 to 1.12)</td>
<td>0.40 (0.09 to 0.71)</td>
</tr>
<tr>
<td>Stress</td>
<td>2</td>
<td>1</td>
<td>-0.23 (-0.39 to -0.07)</td>
<td>-0.27 (-0.40 to -0.13)</td>
</tr>
</tbody>
</table>

Slide courtesy of Jill Williams, MD

Taylor et al, BMJ, 2014
Fact #5: Tobacco Treatment is Important to Mental Health Recovery

**DSM-V Tobacco Use Disorder**  Must exhibit 2 or more:

- Withdrawal
- Tolerance
- Desire or effort to cut down/control use
- Great time spent obtaining/using
- Reduced occupational, recreational activities
- Use despite problems
- More consumed than intended
- Craving; strong urges
Tobacco Withdrawal

- 4 or more:
  - Depressed mood
  - Insomnia
  - Irritability, frustration or anger
  - Anxiety
  - Difficulty concentrating
  - Restlessness
  - Increased appetite or weight gain
The Brain on Nicotine

Nicotine

- Dopamine → Pleasure, Appetite Suppression
- Norepinephrine → Arousal, Appetite Suppression
- Acetylcholine → Arousal, Cognitive Enhancement
- Vasopressin → Memory Enhancement
- Serotonin → Mood modulation, Appetite Suppression
- Beta-endorphins → Reduced Anxiety & Tension

Nicotine hits the brain 7 seconds after inhalation, resulting in release of these neurotransmitters. These rewarding effects make Nicotine as addictive as Cocaine & Heroine

Dr. Neal Benowitz, 1997
Mental Health Providers are especially well equipped to help

- Pharmacological treatments (currently 7 FDA approved, does NOT include E-cigs/ENDS)
  - 4 require a prescription
  - 3 OTC
- Psychosocial treatments (CBTs, behavioral therapies, MET, MI, etc.)
- Combined treatment produces best outcomes
Intensive Treatment for People with SMI

- A general rule regarding tobacco treatment efforts for SMI: more is better.
  - More intensive treatment frequency/duration
  - More intensive pharmacotherapy
    - Increased dose
    - Increased combinations
    - Longer duration

- Involving more than one type of provider leads to greater success.
Fact #6: APA Guidelines/Recommendations

• APA included Nicotine Use Disorders in the “Practice Guideline for the Treatment of Patients with Substance Use Disorders” and they state...“specific treatment of comorbid disorders should be provided”.

• Recommend “the multiple negative health effects of tobacco use make it important for clinicians to identify tobacco users, and be familiar with the medications and psychosocial interventions ...”

• Also stated, “An important but often neglected issue is the incorporation of NRTs & smoking cessation-related advice & aftercare into treatment plans on patient discharge.”
Fact #7: ASAM Statement on Nicotine Addiction & Tobacco

• Nicotine is the psychoactive drug in tobacco
• Nicotine addiction is especially prevalent among those who suffer from alcoholism and from other drug dependencies
• The ASAM recognizes that nicotine is an addictive drug, and there is no safe level of consumption...Abstinence from tobacco should be the ultimate goal for clinical interventions regarding tobacco use and addiction. ASAM advocates and supports the development of policies and programs which promote the prevention and treatment of nicotine addiction.”
• ASAM encourages policy changes that lead to the integration of evidence-based nicotine addiction treatment into mental health & addiction services. Addiction treatment services should address nicotine addiction on a par with other chemical addictions.
Tobacco & Mental Health

• More than 5 national reports since 2013 indicating:
  • Despite overall declines in smoking, more people w/mental illness smoke than those w/o
  • Smoking leading cause of death & disease
  • Quitting does NOT result in worsening symptoms of mental illness
  • Tobacco treatment should be part of overall approach to wellness
  • Mental health providers are well equipped to help
  • Adults w/ mental illness want to quit, can quit, & benefit from proven treatments
Indiana Landscape

• DMHA has contract language mandating tobacco screening & treatment as well as tobacco free grounds.

• Many CMHC’s in Indiana have integrated evidence-based tobacco assessment & treatment now

• Bringing Indiana Along is a partner available to provide FREE technical assistance, training, and assist with overcoming any issues along the way.
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