Addressing Tobacco Dependence in Addiction Treatment Settings

System, Program and Clinical level Strategies

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Adopting Evidence Based Practice: Need Program Change & Staff Training

- We need to change the culture so that “not smoking” is “the norm”
- Strategies for Lower-Motivated
  - Feedback Tools & MET
  - Wellness and Recovery / Healthy Living Groups
  - Nicotine Anonymous
  - Other psychosocial treatments

Like other addictions: One day at a time Experience, Strength, and Hope

- Multiple quit attempts is the norm
- Are you really working the steps for tobacco?
  - Fellowship – support
  - Relapse prevention
  - 90 / 90, etc
- Utilizing all the tools in the toolbox
  - Medications, Counseling, and Nic A
- Problem List: 305.1 & 292

Why Address Tobacco Dependence in Addiction Treatment Settings?

- Most clients smoke (50 to 95%)
  - NYS OASAS 2006 Data (63% - 84%)
  - Many of the cigarettes consumed in the US are by individuals with an addiction or mental illness (44%)
- Most individuals in addiction recovery will die because of tobacco-caused medical diseases
- Tobacco addiction is an addiction:
  - be pro-recovery and wellness
- Second Hand Smoke
- Nicotine use is a trigger for other substance use
- Tobacco can alter psychiatric medication blood levels – smokers need more medication

Nicotine Dependence & Psychiatric Disorders

- Why are the rates so high?
- What is the impact of tobacco use?
  - — Biological, psychological, and social issues
  - — On health and wellness?
  - — On psychiatric symptoms & outcomes? QOL?
  - — On other addictions?
  - — On medication levels & effectiveness?
- Are there beneficial aspects?
  - — Self-medication & Addiction (dependence / withdrawal)
- Does this group use tobacco differently?

Treating Tobacco Dependence Simultaneously with other Addictions

- Does Usual Treatment Work?
  - Need to adapt treatment?
  - What medications? (addiction & psychiatric)
  - What psychosocial treatments?
- It's "normal" to smoke in mental health and addition treatment settings
  - How change the culture?
  - How change treatment program & system?
  - What is the impact of public policy and tobacco control on individuals with mental illness?

Treating Tobacco Dependence in Addiction Treatment or Recovery

- Meta-analysis of 19 randomized controlled trials
- Treating tobacco dependence during rehab or afterward is effective and comparable
- Enhanced long-term addiction abstinence by 25% and more are short-term tobacco abstinent
- Relapse to Alcohol: No difference among treatment groups

Prochaska JJ, et al. J Consult Clin Psychol 72:1144-1156, 2004

Clinical, Program, & System Issues

- What are the ongoing barriers?
- What are the innovations?
- How do we continue to change the field to better address tobacco use and dependence?
  - Clinical - screen, assessment, treatment
  - Program - training, QI, program integrity
  - System - collaboration, networks, financial

UMDNJ Faculty & Staff – Tobacco Dependence

- **John Slade MD – mentor and friend**
- **Tobacco Dependence Program**
- **NIDA K23 Awards Mentees:**
  - **Jill Williams, MD** **Nicotine Dep & Schizophrenia**
  - **Edward Boudreaux, PhD** Emergency Department
  - **Marc Steinberg, PhD** **Psychosocial** Treatments
- **CINJ Career Award Mentees:**
  - **Jonathan Foulds, PhD** Novel Pharmacotherapies
  - **Michael Steinberg, MD** Tobacco & Medical Problems
- **NIDA Re-Entry Career Award Mentees:**
  - **Adriana Cordal, MD**. Enhancing Motivation
- **VA NJ Mentees**:
  - **David Smelson PsyD, Brad Sussner PhD, and Steve Maslany MD**

UMass Tobacco Dependence Treatment and Research Programs

- UMass Center for Tobacco Prevention and Control
- Quit Works
- Massachusetts Tobacco Treatment Specialist (TTS) Training and Certification Program
- UMass Department of Psychiatry
  - Clinical, Research, Training, & System Consultation
  - Basic Science, Health Services, and Clinical Research
  - Addressing Tobacco in Addiction & MH Settings Agenda
  - Community Partnership Programs – RWJF, MA State

www.tobaccodependence.org

ATTOC Tools for Change

- Support Local Champion & Leadership Group
- On-Site Consultation 3 days
  - Review current policies and practices
  - Flesh out a change plan
  - Meet with staff to discuss barriers they experience in implementation
  - One-Day Tobacco Training for all staff
- Advanced Training for key staff available
  - (1) state-of-the-art techniques for treating nicotine dependence, and
  - (2) the skills needed to treat nicotine dependence in drug abuse clinics.
- Support medication options

ATTOC: Agency Goals and Accomplishments Tool

- Major goal for ATTOC
  - Staff Training & Improving Clinical Services
  - Program Development
  - Supporting Staff Recovery
  - Implement Policies for Smoke-free grounds
    - For Staff
    - For Patients
- Performance Measures Metric
- Threshold, Target, and Stretch Goals
- Importance of Communication (within organization and with outside network)
- Tracking and Sustaining Change

Steps for Addressing Tobacco within Treatment Programs

1. Establish Preliminary Organizational Goals for change
2. Establish a leadership group and have them commit to change
3. Create a Change Plan and Timeline that are realistic
4. Create some short term goals that are easily achievable and inform others of these successes
5. Conduct staff training and ongoing supervision
6. Support recovery for staff who are tobacco dependent

Steps for Addressing Tobacco within Treatment Programs

7. Require better assessments & treatment planning
8. Incorporate patient education materials
9. Support medications for tobacco dependence treatment
10. Integrate motivational, stage-based psychosocial treatments throughout
11. Develop onsite Nicotine Anonymous meetings
12. Develop written Addressing Tobacco Policies

Step 1: Establish Preliminary Goals for Change

- Acknowledge the importance to change the culture
- Establish Preliminary Organizational Goals
- Establish Champion and Co-Champion
- Leadership and Staff “buy-in”
- Initiate discussions with staff and assess local barriers

Champions

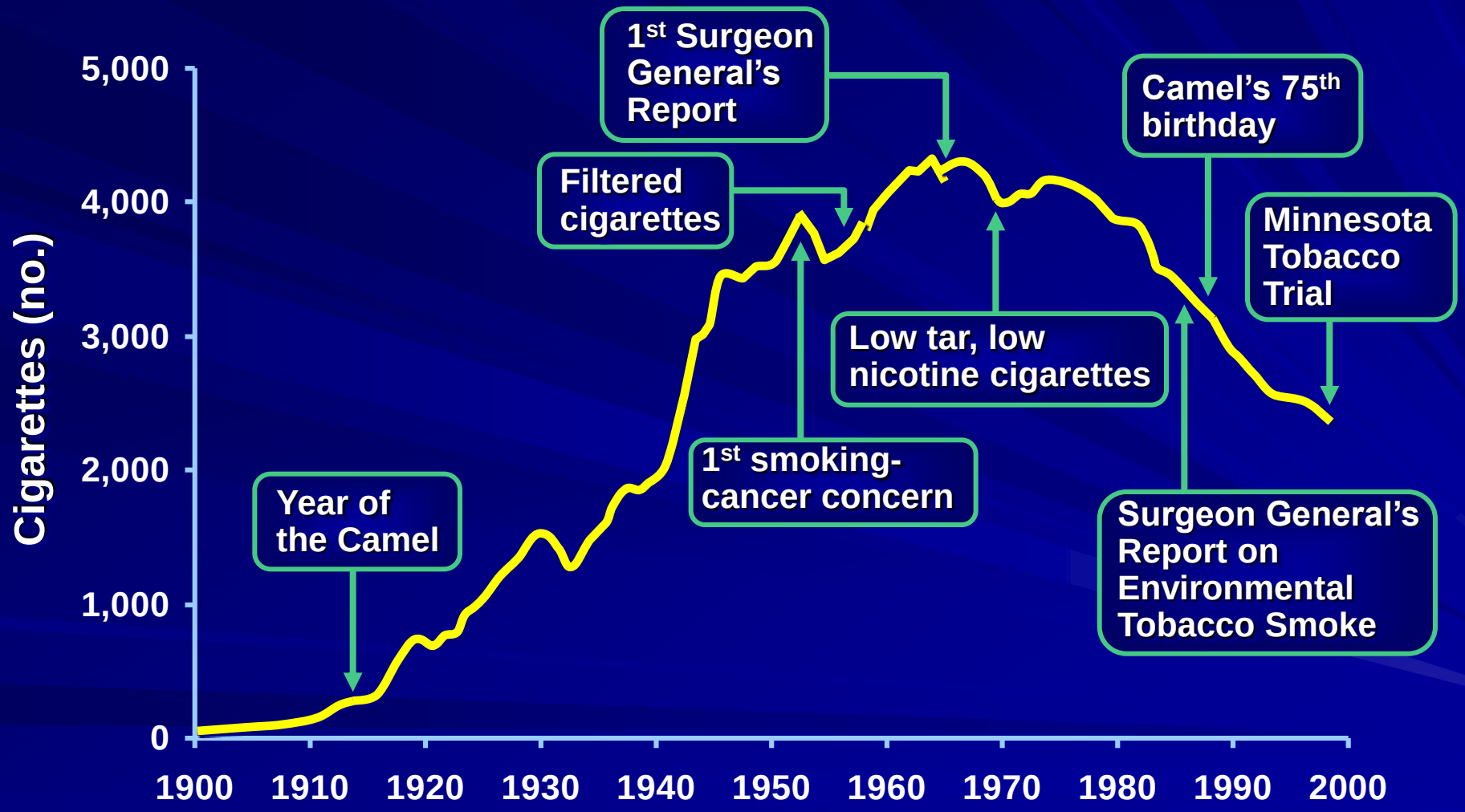
- What is a Champion?
- Assemble Leadership Team
- Facilitate leadership team activities
- Can oversee our consultant activities and motivates the cultural change process.

Alcoholism and Nicotine Dependence Bill Wilson, AA Co-founder

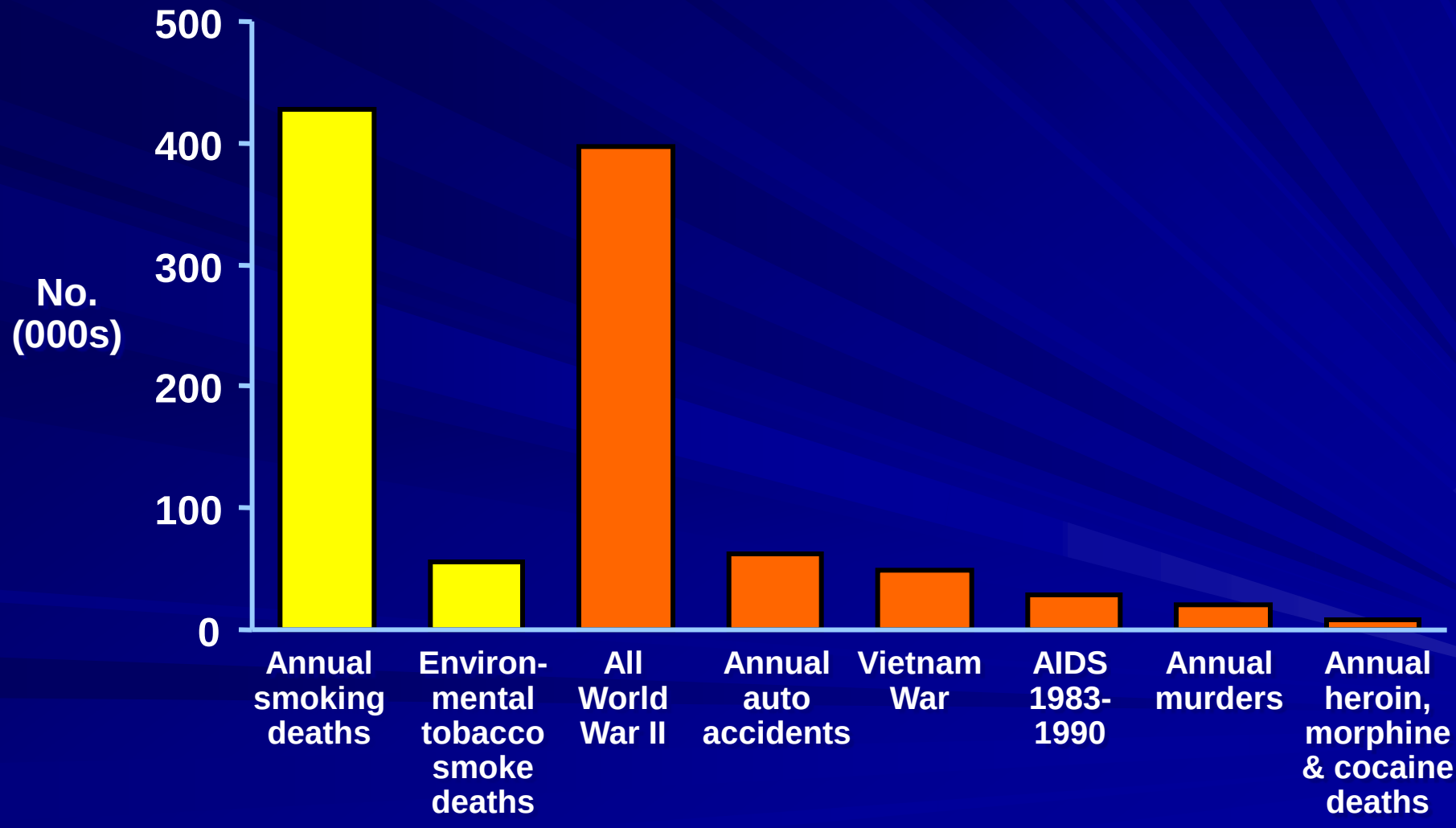
"A heavy, sloppy smoker all his life, he developed emphysema in the 1960s. It killed him. He gave his last speech to the International AA Convention in Miami in 1970, lifted to the platform in a wheelchair, gasping for breath and sucking oxygen from the tank that was always with him."

Robertson: Inside Alcoholics Anonymous

Adult Cigarette Consumption and Major Smoking-and-Health Events – USA



Cigarette Death Epidemic in Perspective



Tobacco Smoke Contents (> 4000)

- Nicotine – Causes Dependence
- Carbon monoxide – Reduces Oxygen carrying capacity
- Carcinogens (50)
  - Polycyclic aromatic hydrocarbons (PAH)
  - Benzopyrenes
    - 50,000 times as carcinogenic as saccharin
  - Nitrosamines
- Toxins

Tobacco smoke effects

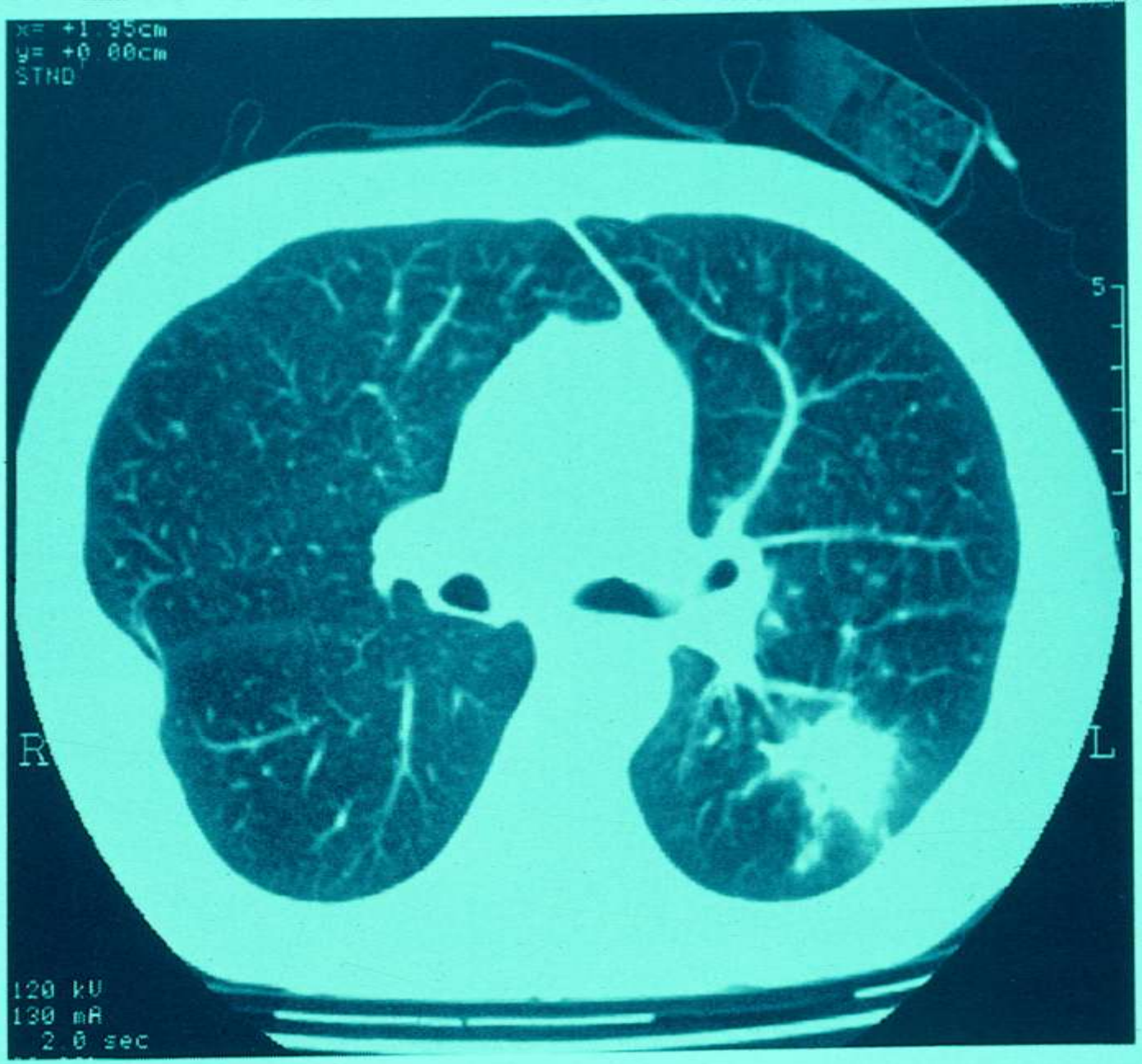
- Cardiovascular effects = largest killer
- Pulmonary damage
  - COPD, Asthma, Bronchitis
- Vascular damage
  - Vasoconstriction and endothelial damage
- Carcinogenesis - DNA damage
  - Lung Cancer
  - Nearly one-third of all cancer deaths: Cervix, Bladder, Kidney, Mouth, Larynx, Esophagus, Pancreas, etc

Others

- Respiratory infection susceptibility
- Osteoporosis
- Impotence and decreased fertility
- Macular degeneration/cataracts
- Ulcer/reflux disease
- Poor wound healing
- Anesthesia / post-operative complications
- Wrinkles and Bad Breath

Health Effects of Environmental Tobacco Smoke

- Developmental
  - Low birth weight (10-20,000 cases/yr)
  - SIDS (2-3,000 deaths/yr)
- Respiratory
  - Childhood infections (bronchitis, ear) (> 1 million/yr)
  - Asthma (up to 1 million exacerbations/yr)
- Cardiovascular
  - Coronary artery disease (35-62,000 deaths/yr)
- Cancer
  - Lung (3000 deaths/yr)
  - Sinus, Cervix, etc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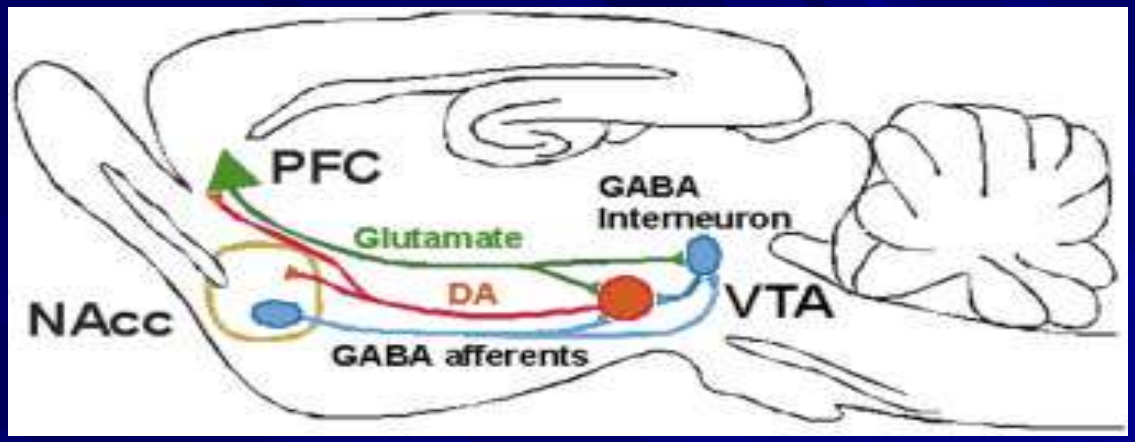
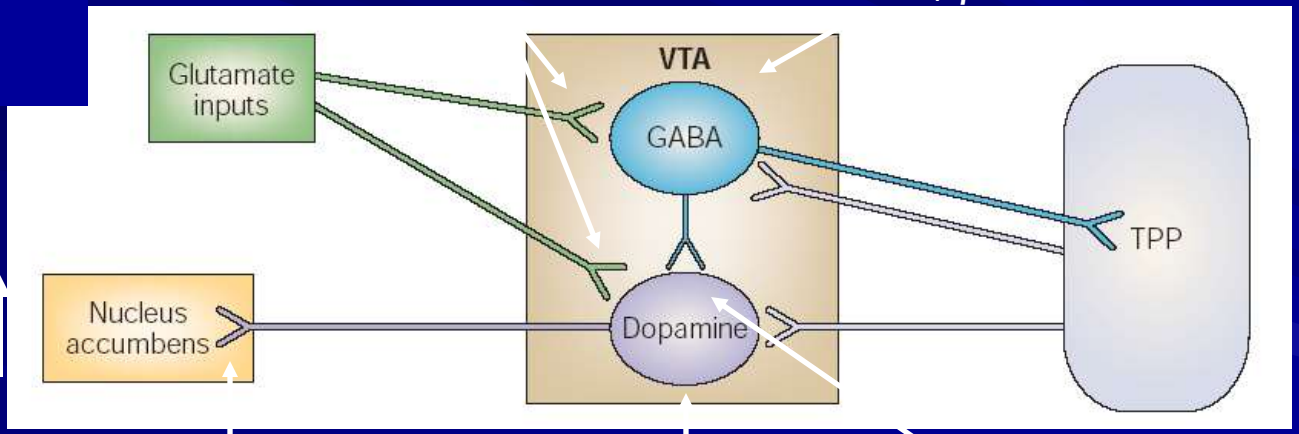
Self mutilation by smoking—this patient had all four limbs amputated for a Buerger's type of arteritis. His cigarette holder was made out of a coat hanger by one of his friends on the ward.

The Mesocorticolimbic Pathways and nAChR Expression



α7

α4, α5,
α7, β2

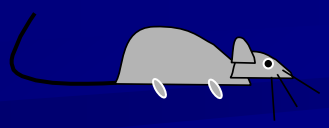


DA

α4β2*

α4, α5,
α6, β2, β3

α4, α5,
α6, α7, β2



Modified from Laviolette and van der Kooy,
Nature Reviews Neuroscience, 2004

Psychiatric co-morbidity is common in adolescent smokers

- Disruptive behavior disorders
  - oppositional defiant disorder (milder)
  - conduct disorder (more aggressive / severe)
  - attention-deficit/hyperactivity disorder
- Major depressive disorders
- Alcohol and other drug use disorders
- Anxiety disorders (less)
  - Upadhyaya HP, Deas D, Brady KT, & Kruesi M

Step 2: Establish a Leadership Group & Prepare for Change

- Identify members – to reflect the goals
- Refine the Vision and Goals
- Continuous Quality Improvement Effort
- Assemble written policies, materials
- Engage with consultant

Leadership Team

- Multi-disciplinary Steering team
- Flesh out vision and change plan
- Membership includes organizational leaders and staff from areas that will be impacted by goals of ATTOC
- Continuous Quality Improvement
- Smaller workgroups to implement specific goal areas (assessment, medications, communication, etc)

Step 3: Create a Change Plan and Implementation Timeline

- What are the short, medium, and long-term goals and plans?
- Who will be affected? What will be achieved? When will goals be achieved?
- Establish a timeline with measurable goals and objectives.
- Set dates for each goal and identify person(s)/department(s) responsible for achieving the goal.
- Assess organizational readiness for change

Barriers to Addressing Smoking

- Patient Resistance
- Family Resistance
- Provider Resistance
  - Concern about losing focus, relapse, and increased acting out
- Board of Directors
  - Concern about financial losses with smoke free grounds - need a level playing field

Barriers to Tobacco Dependence Treatment

- Lack of staff training
- “not my role” – go to primary care
- Staff who smoke – normalize smoking, staff may help patient’s access cigarettes, program may sell cigarettes
- Restrictive formulary or insurance coverage of the cost of medications
- Limited income and cannot afford OTC medications

Reasons given not to treat Tobacco Dependence Simultaneously

- Too hard
- Not a real drug
- Consequences not immediate
- Not disruptive to patient's life
- Jeopardize alcohol or other drug recovery
- Not essential for alcohol or other drug recovery
- Adds to stress of treatment

Step 4: Easier System Changes

- Use “Alcohol, Tobacco, and Other Drugs” language
- Modify existing assessment forms
  - more on tobacco use, past treatment, & motivational levels
- Add Tobacco Dependence to problem list
- Re-label “smoke breaks”
  - Do not allow staff to smoke with patients
- Provide Educational Materials
- Display Posters that support addressing tobacco
- Create less visible places for smoking
- Break larger change goals into smaller steps
- Acknowledge any short term successes

Step 5: Conduct Staff Training

- Assess Barriers / Resources and “Buy in”
- Teach assessment, treatment planning, discharge planning
- Treatment approaches – medications and psychosocial treatments
- How to integrate in current work
- How to integrate into the clinical program
  - Patient flow
- Local resources, national web based interventions and educational sites, and community support groups.

Step 6: Provide Treatment Assistance for Staff

- Staff who smoke are often ambivalent about providing tobacco dependence treatment and ATTOC
- Provide medication, psychosocial treatment, and social supports
- Sensitivity to staff's nicotine dependence is important in training

Advise: Relevance of Quitting

- **Personalize the message**
  - Better health
  - Fresher breath
  - More money
  - Role model
  - Freedom
  - More energy
- **Impact on their family and social life**
  - Environmental tobacco smoke (family, children, pets, etc)
  - Live long enough to see grandchildren grow up
- **Financial**
  - Fewer sick days from work
  - Costs for tobacco use

Helping Staff who smoke: Adverse Employment Outcomes Associated with Smoking

- Involuntary turnover
- Accidents
- Injuries
- Discipline problems
- Mean Absence Rates
- 17 workdays dedicated to smoke-breaks per year

Economic Benefits to Employers

- Reduced Absenteeism
- On-the-Job Productivity
- Reduced Life Insurance
- Reduced Medical Expenditures
  - workers, retirees, medicare, other
- Benefit to Cost Ratio
  - 1:1 3rd year & 5:1 10th year

Step 7: Document Assessment and Treatment Planning

- Train staff
- Change intake/assessment forms
- Modify existing tools
  - Addiction Severity Index
- Motivational assessment
- Add nicotine dependence (305.1) & nicotine withdrawal (292) on problem list

Assessing Motivation to Change

- Formal: SOCRATES & URICA
- Informal:
  - Importance, Readiness, & Confidence
  - DARN-C
  - Decisional Balance
  - Time-line / Quit Date
  - Countertransference & Non-verbal cues

Personalized feedback: what mattered

- Carbon Monoxide Meter score and feedback (like an alcohol breathalyzer)
  - Big impact on patients
  - Short & long term benefits to quit
- Cost of Cigarettes for the year
- Medical conditions affected by tobacco
- Links with other substances, relapses, etc

Step 8: Incorporate Smoking Issues into Patient Education

- Effects of tobacco, interaction of medications and tobacco, and what treatments are available.
- Fact sheets on common patient concerns, strategies to address cravings, & personalizing risks.
- Impact on family and what the family can do.
- Review current educational groups and programs for integrating tobacco.
- Posters and brochures.

Step 9: Provide Medications for Treatment & required Abstinence

- Acute withdrawal (detoxification),
- Protracted withdrawal
- Maintenance
- Provide patient education!!!!
- Required abstinence period management

7 FDA approved Medications

- Five Nicotine Replacement Therapies
  - patch, gum, spray, lozenge, & inhaler
- Bupropion (Zyban)
- Varenicline (Chantix)

Nicotine Patch Dose Based on Serum Cotinine (Hurt et al)

Baseline Serum Cotinine	Initial Nicotine Patch Dose, mg/d
≤ 200	22
201-300	33
> 301	44

R01 AA-11219

Step 10: Integrate motivation based psychosocial treatments

- Individual and Group
- How does patient flow through agency?
- What is length of stay?
- Wellness and Recovery Group
- Preparation Group
- Quitting Group

Motivation Based Treatment

- Lower Motivated
  - **“5 R’s”**
    - **Relevance**
    - **Risks**
    - **Rewards**
    - **Roadblocks**
    - **Repetition**
  - MET = MI + Personalized Feedback
  - Behavioral Disconnects
  - Healthy Living / Wellness Interventions

MET = MI + Feedback Tools

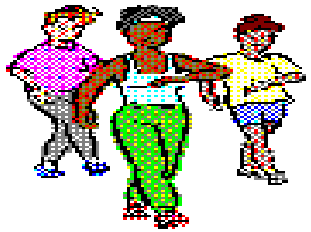
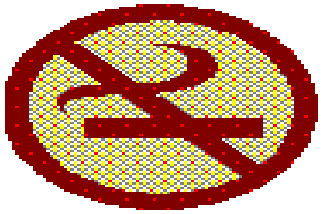
- Motivational Interviewing (Style)
  - Empathy, Client-Centered, Respects readiness to change, embraces ambivalence
  - Directive – one problem focused (needs adaptation for poly-drug & COD)
- Motivational Tools - Personalized Feedback (Content)
  - Assessment, including motivation
  - Personalized Feedback
  - Decisional Balance: Pros & Cons
  - Change Plan & Menu of Options

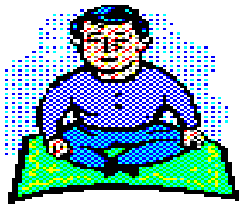
MI Mantra: REDS & OARS

- REDS = Principles of MET
  - Roll with Resistance
  - Express Empathy
  - Develop Discrepancy
  - Support Self-Efficacy
- OARS = backbone of clinical intervention
  - Open-ended questions
  - Affirmations
  - Reflective listening
  - Summaries

Wellness and Recovery Group”

- Learning about Healthy Living Group from Mental Health Settings
- Education and motivation based
- open-ended group with rolling admission and no time limit.
- Clients can transition to the “Quitting Smoking” group when ready



Learning About Healthy Living

Williams, Ziedonis, Speelman, O'Hea, Vreeland

a collaborative project between

Tobacco Dependence Program — UMDNJ School of Public Health, University of Medicine & Dentistry of New Jersey

UBHC University Behavioral Healthcare — University of Medicine & Dentistry of New Jersey — UMDNJ

UMDNJ Robert Wood Johnson Medical School, University of Medicine & Dentistry of New Jersey

* funded by the New Jersey Division of Mental Health Services

Quitters Group

- Action-oriented
- Quit Date
- Medication option
- Psychosocial treatment based
- Closed group format lasts 6+ weeks
- Multimodality treatments
  - Cognitive-Behavioral therapies
  - Motivational Enhancement Therapies
  - Education
  - Social Support
  - Nicotine Anonymous Principles

Step 11: Develop Onsite Nicotine Anonymous Meetings

- 12 Steps is part of Treatment Culture
- Assess Local Options
- Develop Nic-A on-site
- www.nicotine-anonymous.org

Nicotine Anonymous

- Fellowship / Group support is often the cornerstone of any recovery program
- Working the Steps
- Nicotine Anonymous meetings are available, but fewer. www.nicotine-anonymous.org
- Encourage Non-smoking AA and NA
- 1-877-TRY-NICA

Step 12: Develop Policies that support new clinical initiatives and goals for grounds

- Identify current policies
- Develop policies to match goals
- Consider due process and needs for enforcement.

Patient Care Policy Issues

- Screen all patients for tobacco use on admission as part of the initial assessment
- Tobacco abstinence required of patient population
- Incorporate tobacco dependence into the Addiction treatment plan using PHS 2000 guidelines
- Integrate tobacco education into existing programming
- Pharmacotherapy is offered
- Document all tobacco interventions in patient chart
- Prioritize referral to tobacco-free facilities and 12-Step meetings as part of continuing care recommendation

Policy Items for Consideration

- Environmental Policy
  - Tobacco-free facility, grounds and vehicles. Ban sales of cigarettes and tobacco paraphernalia
- Employment Policy
  - Tobacco dependence training is required of all staff
  - Staff is prohibited from smoking at the facility, having tobacco paraphernalia in their work environment, or show evidence of tobacco use during working hours
  - Policy communicated during orientation and annual employee performance review

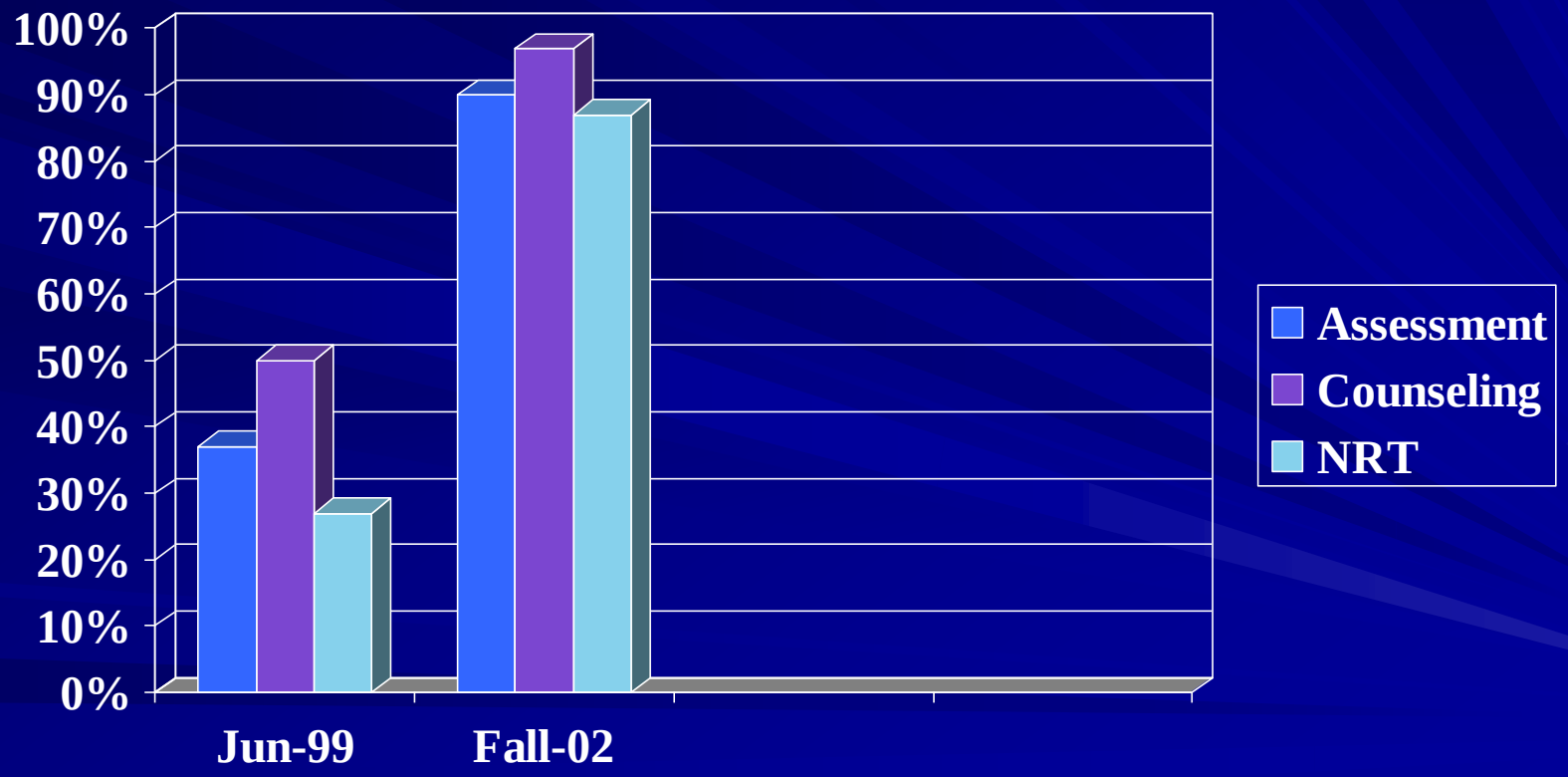
A BIG next step:

- Creating a totally Tobacco-Free Environment
- Tobacco-free facility and grounds
- Implement comprehensive approach
- Tobacco-free grounds is most challenging aspect of implementation
- Need enforcement of licensure standards

Smoke-Free Residential Programs

- Going Smoke-Free Units and Grounds does not cause feared new problems
  - No Increase in disruptive behaviors
  - No Increase in AMA discharges
  - No Additional seclusion and restraints
  - No Increase in use of PRN medications
    - Patten et al., 1995; Haller et al., 1996

NJ Addiction Program OC Intervention: % facilities reporting implementation



Patient comments at discharge (n=1297)

- 44% stated policy helped
- 41% didn’t smoke
- 22% plan to abstain
- 13% plan to seek additional help
- 4.5% left prematurely
- 31.5% smokers used NRT
- 24 days = mean length of NRT use

Sustainability and the ongoing Journey

- Continue the staff training
- Continue support for staff recovery
- Continue to integrate tobacco
- Change the culture to “non-smoking” being the norm
- Promote wellness and recovery

Other Resources

- NY State Tobacco Dependence Resource Center
  - www.tobaccodependence.org/
- NASMHPD's Tool Kit
  - www.nasmhpd.org
- Toolkit from The Alliance for the Prevention and Treatment of Nicotine Addiction (APTNA)
  - www.aptna.org/APTNA_Prov_Toolkits.html

Clinical Practice Guidelines & Cost-Effectiveness Data

- Treating Tobacco Use and Dependence - Public Health Service Clinical Practice Guideline (2000)
- Reducing Tobacco Use: Report of the Surgeon General (2000)
- American Psychiatric Association's Substance Use Disorder Treatment Guidelines (2006) www.psych.org

Other Resources

- William J. Panepinto, LMSW
  - Director, NYS Tobacco Dependence Resource Center, Alcoholism & Substance Abuse Providers of NYS
  - 518.426.3122
  - bpanepinto@asapnys.org
- **The New York State Smokers' Quitline** 1-866-NY-QUITS (1-866-697-8487)

Conclusion

- The Time is now to Address Tobacco in all Substance Abuse Treatment Settings
- Motivation Based Treatment is needed
- Medication and Psychosocial treatments are effective, but staff training is needed
- Program and system changes are critical to the broad-based success of model programs