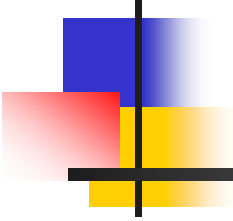


TREATING TOBACCO ADDICTION IN THE PATIENT WITH CHEMICAL DEPENDENCE



STEVEN KIPNIS, MD, FACP, FASAM
MEDICAL DIRECTOR, NYS OASAS



CREATE THE PERFECT DRUG

- WHAT ROUTE OF ADMINISTRATION?
- HOW OBTAINED?
- FREQUENCY OF ADMINISTRATION?
- PRICE?
- AVAILABILITY?
- OTHER?



CHARACTERISTICS

- 2 CENTS PER HIT
- EASILY ABSORBED
- REACHES THE BRAIN IN 8 - 10 SEC.
- LEGAL
- EASILY OBTAINED
- FASHIONABLE ?



CIGARETTE SMOKING IN THE U.S.

- 70 MILLION ADULTS STILL SMOKE
- DECREASE FROM 28% OF THE POPULATION IN 1990 TO ABOUT 22% OF THE POPULATION PRESENTLY
 - #1 UTAH 12%
 - #2 CALIFORNIA 17%
 - HIGHEST RATE – KENTUCKY 31%
 - 18.1 PERCENT OF NEW YORK ADULTS SMOKED IN 2004, DOWN FROM 20.8 PERCENT IN 2003.

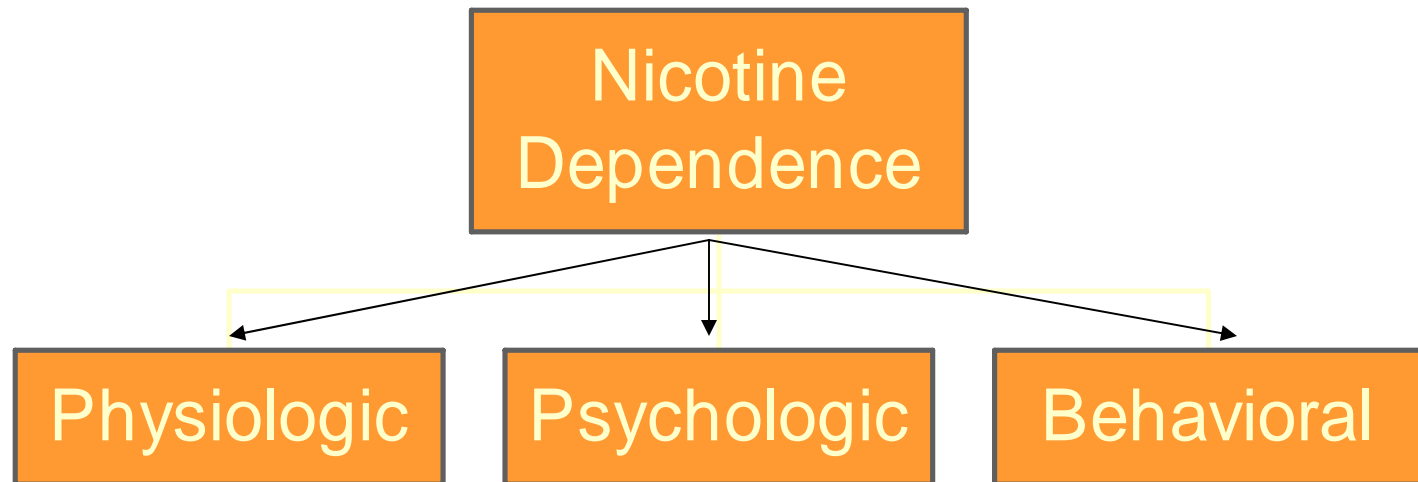


25% OF THE US POPULATION USES TOBACCO PRODUCTS **BUT**

- APPROX **71%** OF ALL ILLICIT DRUG USERS SMOKE
- **74 – 100%** OF PATIENTS IN DRUG TREATMENT SMOKE
- **85 – 98%** OF PATIENTS IN METHADONE MAINTENANCE TREATMENT SMOKE



TOBACCO ADDICTION IS A "3-PRONGED" DEPENDENCE





TOBACCO DEPENDENCE

- AS AN ADDICTIVE SUBSTANCE, NICOTINE, ON A MILLIGRAM FOR MILLIGRAM BASIS, IS 10 TIMES MORE POTENT THAN HEROIN.
 - 92% OF PEOPLE WHO SMOKE 100 CIGARETTES IN THEIR LIFETIME BECOME ADDICTED!

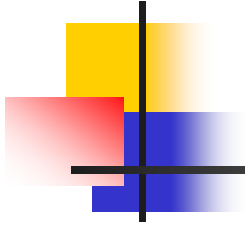
WITHDRAWAL SYMPTOMS





FAGERSTROM TEST FOR TOBACCO DEPENDENCE

1. How soon after you wake up do you smoke your first cigarette?
Within 5 min (3) 5 - 30 min (2) 31 - 60 min (1) after 60 min (0)
2. Do you find it hard not to smoke in places that you shouldn't smoke, such as in church, in school, in a movie, on the bus, or in a hospital?
Yes (1) No (0)
3. Which cigarette would you hate most to have to give up?
The first one in the morning (1) Any other one (0)
4. How many cigarettes do you smoke each day?
10 -fewer (0) 11-20 (1) 21-30 (2) 31 or more (3)
5. Do you smoke more in the first few hours after waking up than you do during the rest of the day?
Yes (1) No (0)
6. Do you still smoke, even if you are so sick that you are in bed most of the day or if you have a severe cough?
Yes (1) No (0)



TOBACCO AND ALCOHOL : THE MEDICAL CONNECTION



CIGARETTE SMOKING EXACERBATES ALCOHOL INDUCED BRAIN DAMAGE

- **CHRONIC ALCOHOL USE DAMAGES THE BRAINS OF ALCOHOLICS**, PARTICULARLY THE FRONTAL LOBES WHICH ARE CRITICAL FOR HIGH – ORDER COGNITIVE FUNCTIONING (PROBLEM SOLVING, REASONING, ABSTRACTION, PLANNING, FORESIGHT)
- **CHRONIC CIGARETTE USE INCREASES THE SEVERITY OF THIS BRAIN DAMAGE**
 - MEASUREMENTS MADE ON SMOKERS, LIGHT SMOKERS, ABSTINENT ALCOHOLICS AND LIGHT DRINKERS USING FUNCTIONAL MRI'S (DURAZZO ET AL, *ALCOHOLISM:CLINICAL AND EXPERIMENTAL RESEARCH* DEC 2004)



ALCOHOLIC SMOKERS LOSE MORE BRAIN MASS (9/30/2005)

- ALL ALCOHOLICS ARE KNOWN TO LOSE SOME BRAIN MASS, BUT THOSE WHO ALSO SMOKE LOSE MORE THAN NONSMOKERS
- THE STUDY RAISES THE QUESTION OF WHETHER ALCOHOLISM TREATMENT PROGRAMS SHOULD ALSO ADDRESS SMOKING, ESPECIALLY SINCE IT MAY CAUSE COGNITIVE IMPAIRMENT AS CLIENTS GET OLDER.

THE RESEARCH WAS PUBLISHED IN THE AUGUST 2005 ISSUE OF THE JOURNAL ALCOHOLISM: CLINICAL AND EXPERIMENTAL RESEARCH.



NUTRITIONAL OPTIC NEUROPATHY

TOBACCO-ALCOHOL AMBLYOPIA

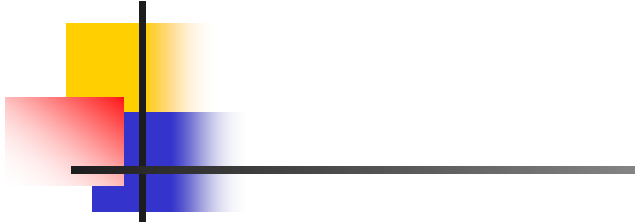


DECREASED VISUAL ACTIVITY

TOBACCO SMOKING AND SMOKELESS TOBACCO - MAJOR RISK

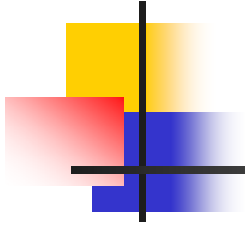


- HEAD AND NECK DISEASE – ESPECIALLY IF USE ALCOHOL

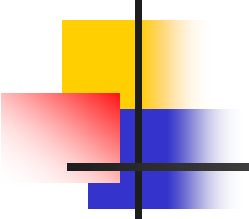


Want
to Quit?





- 1798. SCIENCE: FAMED PHYSICIAN BENJAMIN RUSH WRITES ON THE MEDICAL DANGERS OF TOBACCO AND CLAIMS THAT SMOKING OR CHEWING TOBACCO LEADS TO DRUNKENNESS.

- 
-
- HURT ET AL *ALC CLIN EXP RES* 1994 VOL 18;4 PP867-872 "NICOTINE DEPENDENCE TREATMENT DURING INPATIENT TREATMENT FOR OTHER ADDICTIONS"
 - 50 CONTROLS AND 51 INTERVENTION FOLLOWED FOR 1 YEAR
 - 1 YEAR CONFIRMED CESSATION RATE IN THE INTERVENTION GROUP WAS 11.8% AND 0% IN THE CONTROL GROUP
 - 1 YEAR RELAPSE RATE (ALC AND DRUG) WAS 31.4% IN THE INTERVENTION GROUP AND 34% IN THE CONTROL GROUP

Recovery Rates After Treatment for Alcohol/Drug Dependence

Tobacco Users vs. Non-Tobacco Users

Elizabeth B. Stuyt, M.D.

Because it has been seen repeatedly that using another addictive drug frequently leads to relapse to using the initial drug of choice, most chemical-dependence treatment specialists recognize the necessity of addressing all drugs of abuse in the same treatment setting. This treatment philosophy, however, does not appear to apply to the drug nicotine. Although a significant number of persons with alcohol/drug dependence use tobacco on a regular basis, there do not appear to have been any studies conducted on the effect of nicotine use on outcome after treatment for alcohol/drug dependence. In a prospective study, the authors compared 12-month recovery rates after inpatient treatment for alcohol/drug dependence in tobacco users and non-tobacco users. Significantly better recovery rates were discovered for non-tobacco users than tobacco users, especially if the drug of choice was a sedative, such as alcohol or narcotics. Data presented here support the theory that continued nicotine use may be a relapse factor for resuming alcohol use. (Am J Addict. 1997; 6:159-167)

It is well documented in the smoking-cessation literature that alcohol use is a relapse factor for resuming tobacco use.¹⁻³ Although there are indications that the reverse may also be true,^{4,5} the question of whether tobacco use is a relapse factor for resuming alcohol use has never been systematically studied, in spite of the evidence⁶ that 80%-95% of alcohol abusers

use tobacco products. A review of several outcome studies for treatment of alcohol and drug dependence indicates that only 13%-36% of patients maintain continuous abstinence to their drug of choice for 6 months to 2 years after treatment.⁷⁻¹² This finding leads to a logical question: What is the percentage of tobacco users in those remaining abstinent vs. those who relapse?

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SIGNIFICANTLY
BETTER RECOVERY
RATES AT 12 MONTHS
IN NON-TOBACCO
USERS THAN TOBACCO
USERS, ESPECIALLY IF
THE DRUG OF CHOICE
WAS ALCOHOL OR
NARCOTICS



INPATIENT TREATMENT SUPERIOR TO OUTPATIENT THERAPY

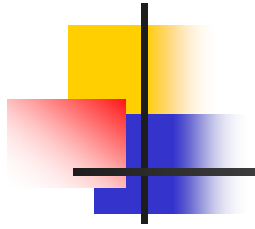
- *MAYO CLIN PROC* 2001;76:124-133
- 8 DAY RESIDENTIAL TREATMENT PROGRAM IS MORE EFFECTIVE THAN OUTPATIENT FOR MODERATE OR SEVERE NICOTINE DEPENDENCE WHEN COMPARING 146 INPATIENTS VS. 292 OUTPATIENTS BETWEEN 1992 AND 1996.
- 6 MONTH ABSTINENCE RATES WERE 45% FOR RESIDENTIAL GROUP AND 26% FOR OUTPATIENT WITH SIMILAR RESULTS AT 12 MONTHS.



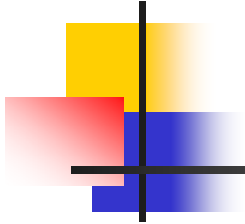
NICOTINE CRAVING AND HEAVY SMOKING MAY CONTRIBUTE TO INCREASED USE OF COCAINE AND HEROIN

■ 2 NIDA STUDIES

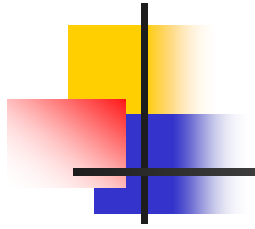
- DR. S. HEISHMAN USED CUE INDUCED CRAVING
 - CUES THAT INCREASED TOBACCO CRAVING ALSO INCREASED CRAVING FOR THE SUBJECTS DRUG OF CHOICE
- D.FROSCH AT SAN DIEGO STATE LOOKED AT METHADONE CLINIC PATIENTS
 - THE AMOUNT OF SMOKING CORRELATED WITH USE OF COCAINE AND HEROIN



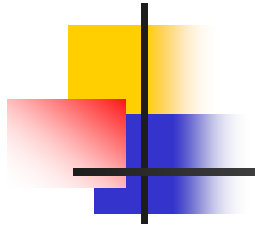
- SULLIVAN AND COVEY IN *CURR PSYCH REP* 2002
 - TOBACCO ASBSTINENCE DOES NOT INCREASE ALCOHOL RELAPSE
 - CONTINUED SMOKING ADVERSELY AFFECTS MJ DEPENDENCE
 - COCAINE AND NICOTINE USE ARE INTER-RELATED



- SHOPTAW ET AL *ADDICTION* 2002
 - IN METHADONE MAINTENANCE PATIENTS
 - MORE OPIATE AND COCAINE FREE URINES DURING TIME OF SMOKING ABSTINENCE THAN DURING WEEKS WHEN THEY SMOKED CIGARETTES



- LEMON ET AL *ADDICTIVE BEHAVIORS* 28 (2003)
1323 – 1331
 - DOES SMOKING CESSATION AFTER ENTERING DRUG ABUSE TREATMENT INFLUENCE DRUG USE 12 MONTHS AFTER TREATMENT?
 - 2316 CIGARETTE SMOKERS IN THE DRUG ABUSE TREATMENT OUTCOME STUDY (DATOS)
 - SMOKING CESSATION DID NOT IMPACT NEGATIVELY ON DRUG ABSTINENCE AND WAS ASSOCIATED WITH GREATER ABSTINENCE FROM DRUG USE (ALCOHOL, SED., OPIATES, MJ, STIM, HALLUC.) AFTER COMPLETION OF TREATMENT



- PROCHASKA ET AL *JOURNAL OF CONSULTING AND CLINICAL PSYCHOLOGY* (2004)
 - META ANALYSIS OF 19 RANDOMIZED CONTROL TRIALS WITH INDIVIDUALS IN CURRENT ADDICTION TREATMENT OR RECOVERY
 - SMOKING CESSATION INTERVENTIONS PROVIDED DURING ADDICTIONS TREATMENT WERE ASSOCIATED WITH A 25% INCREASED LIKELIHOOD OF LONG-TERM ABSTINENCE FROM ALCOHOL AND ILLICIT DRUGS



RECOVERING ALCOHOLIC SMOKERS CAN QUIT SECOND ADDICTION - *MAYO CLINIC* 2005

- THIS IS THE FIRST STUDY TO USE SERUM COTININE CONCENTRATION IN SMOKERS WITH SUSTAINED REMISSION FROM ALCOHOL DEPENDENCE (GREATER THAN 12 MONTHS WITH NO RELAPSE FOR DRUG OR ALCOHOL ABUSE) TO DETERMINE THE NICOTINE PATCH DOSAGES.
 - AT THE END OF PATCH THERAPY THE TOBACCO ABSTINENCE RATE WAS 51 PERCENT. THIS WAS COMPARABLE TO NON-ALCOHOLIC QUIT RATES BUT CONSIDERABLY HIGHER THAN ANTICIPATED, SINCE PREVIOUS STUDIES OF RECOVERING ALCOHOLICS SHOWED END-OF-TREATMENT ABSTINENCE LEVELS AT ABOUT HALF THAT.

MD SUPPORTED TREATMENT

- AVERSIVE
CONDITIONING
- NICOTINE
ANTAGONIST
 - MECAMYLAMINE





NICOTINE PATCH AND ALCOHOL

- DUKE UNIVERSITY RESEARCH
 - FOUND SMALL AMOUNTS OF ALCOHOL CAN ENHANCE THE PLEASURABLE EFFECTS OF NICOTINE
 - ADD MECAMYLIN TO PATCH
 - ANTIHYPERTENSIVE, NICOTINE ANTAGONIST, IF USED WITH NICOTINE PATCH – 37.5% 12 MONTH ABSTINENCE RATES (ROSE ET AL 1994)
 - CAN IMPACT ON ALCOHOL COMSUMPTION AND SMOKING



NON FDA APPROVED MEDICATIONS

- **USE OF ORAL TOPIRAMATE TO PROMOTE SMOKING ABSTINENCE AMONG ALCOHOL-DEPENDENT SMOKERS A RANDOMIZED CONTROLLED TRIAL** BANKOLE A. JOHNSON, DSC, MD, PHD; NASSIMA AIT-DAOUD, MD; FATEMA Z. AKHTAR, MS; MARTIN A. JAVORS, PHD *ARCH INTERN MED.* 2005;165:1600-1605.
- **CONCLUSION** IN THIS TRIAL, TOPIRAMATE (UP TO 300 MG/D) SHOWED POTENTIAL AS A SAFE AND PROMISING MEDICATION FOR THE TREATMENT OF CIGARETTE SMOKING IN ALCOHOL-DEPENDENT INDIVIDUALS.



NON FDA APPROVED MEDICATIONS

- NALTREXONE EFFECTIVE FOR SMOKING CESSATION IN WOMEN
 - RANDOMIZED, DOUBLE-BLIND PLACEBO CONTROLLED TRIAL USING PATCHES AND PSYCHOSOCIAL THERAPY IN ALL; 50 MG NALTREXONE PER DAY AND FOLLOWED FOR 12 WEEKS
 - 44 WOMEN TOTAL
 - 55% OF SUBJECTS COMPLETED
 - 92% OF NALTREXONE TREATED SUBJECTS WERE SUCCESSFUL VS 50% IN THE PLACEBO GROUP



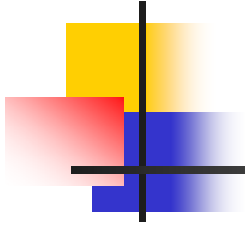
NON FDA APPROVED MEDICATIONS

- RIMONABANT (ACCOMPLIA®)
 - BREAKTHROUGH NEW CLASS OF DRUGS
 - SELECTIVE CANNABINOID-1 (CB-1) RECEPTOR ANTAGONIST
 - FOOD INTAKE AND ENERGY EXPENDITURE MAY BE ALTERED IN SMOKERS
 - TESTED AS A TREATMENT FOR POST-CESSATION WEIGHT GAIN



THE SMOKE FREE ADDICTION TREATMENT UNIT

1. ACKNOWLEDGE THE PROFOUND CHALLENGES TOBACCO CREATES FOR THE ADDICTIONS TREATMENT COMMUNITY.
2. ESTABLISH A LEADERSHIP GROUP OR COMMITTEE AND SECURE THE COMMITMENT OF ADMINISTRATION.
3. DEVELOP TOBACCO – FREE POLICY.
4. ESTABLISH A POLICY IMPLEMENTATION TIMELINE
5. CONDUCT STAFF TRAINING.
6. PROVIDE RECOVERY ASSISTANCE FOR NICOTINE DEPENDENT STAFF.
7. ASSESS AND DIAGNOSE TOBACCO DEPENDENCE IN PATIENTS AND USE THIS IN TREATMENT PLANNING.
8. INCORPORATE TOBACCO EDUCATION INTO PATIENT EDUCATION CURRICULUM.
9. ESTABLISH ON-GOING COMMUNICATION WITH AA/NA AND REFERRAL AGENTS ABOUT THESE CHANGES.
10. REQUIRE STAFF TO BE TOBACCO FREE.
11. ESTABLISH TOBACCO FREE FACILITY AND GROUNDS.
12. IMPLEMENT TOBACCO DEPENDENCE TREATMENT THROUGHOUT THE PROGRAM.



SMOKING KILLS. IF YOU'RE KILLED, YOU'VE
LOST A VERY IMPORTANT PART OF YOUR
LIFE.

BROOKE SHIELDS, ATTEMPTING TO DEMONSTRATE WHY SHE
SHOULD BECOME SPOKESPERSON FOR A FEDERAL
ANTISMOKING CAMPAIGN