FACTORS ASSOCIATED with TOBACCO USE & MENTAL ILLNESS

WHY do INDIVIDUALS with MENTAL ILLNESS SMOKE?

Active psychiatric disorders are associated with daily smoking and progression to nicotine dependence (Breslau et al., 2004).

FACTORS ASSOCIATED with TOBACCO USE in the MENTALLY ILL

NEUROCHEMICAL and RELATED EFFECTS of NICOTINE

Drugs of Abuse

BIOLOGY of NICOTINE ADDICTION: ROLE of DOPAMINE

Nicotine addiction is not just a bad habit. Discontinuation leads to withdrawal symptoms.

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CHRONIC ADMINISTRATION of NICOTINE: EFFECTS on the BRAIN

Human smokers have increased nicotine receptors in the prefrontal cortex.

Image courtesy of George Washington University / Dr. David C. Perry

NICOTINE ADDICTION CYCLE

State of Nicotine Withdrawal


Nicotine withdrawal symptoms:
- Dysphoric or depressed mood
- Insomnia and fatigue
- Irritability/frustration/anger
- Anxiety or nervousness
- Difficulty concentrating
- Impaired task performance
- Increased appetite/weight gain
- Restlessness and impatience
- Cravings

Most symptoms peak 24–48 hr after quitting and subside within 2–4 weeks.

Refer to Withdrawal Symptoms Info Sheet

NICOTINE ADDICTION CYCLE


GENETIC EFFECTS on NICOTINE METABOLISM


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**WHAT is ADDICTION?**

“Compulsive drug use, without medical purpose, in the face of negative consequences”

Alan I. Leshner, Ph.D.
Former Director, National Institute on Drug Abuse
National Institutes of Health

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**MODEL of ADDICTION**

- Impulse control disorders
- Positive Reinforcement

- Compulsive disorders
- Negative Reinforcement

Tobacco Withdrawal
- Daily use of tobacco
- Abrupt cessation/reduction followed within 24 hrs by 4+:
  1. Irritability
  2. Anxiety
  3. Difficulty concentrating
  4. Increased appetite
  5. Restlessness
  6. Depressed mood
  7. Irritability
- Clinically significant impairment
- Not due to GMC

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**SYSTEMIC and TREATMENT FACTORS**

Pub. 1951

**A PRIMER FOR PSYCHOTHERAPISTS**

BEHAVIOR DURING THE INTERVIEW

Should the therapist smoke during the interview? Why not? It will help drain the small amount of undischarged tension which is always present during an interview, and it contributes to the naturalness of his behavior.

Pub. 1951

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**PSYCHIATRISTS in PRACTICE**

(Himelhoch & Daumit, 2003)

- 1992-96 Nat'l Ambulatory Medical Care Survey
- 23% of psychiatric visits dropped from analysis because patient smoking status unknown
- For patients identified as smokers (N=1610)
  - Cessation counseling offered at 12% of visits
  - Nicotine Dependence not diagnosed at any visit
  - Nicotine replacement therapy never prescribed

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2005 AAMC PRACTICE SURVEY: 801 PSYCHIATRISTS

- 62% Ask about tobacco
- 44% Assess readiness to quit
- 62% Advise cessation
- Assist:
  - NRT (23%), other Rx (20%)
  - Cessation materials (13%)
- 14% Arrange follow up
- 11% Refer to others

Psychiatrists the least likely to address tobacco use with their patients relative to other specialties (family medicine, internal medicine, OB/GYN)

PSYCHIATRIC PROVIDERS’ BELIEFS about SMOKING

- Meta-analysis of 38 studies
- 16,369 mental health professionals:
  - 42% perceived barriers to treating smoking
  - 41% had negative attitudes toward smoking cessation
  - 45% had permissive attitudes toward smoking
- Providers’ most commonly held beliefs:
  - Smokers with mental illness don’t want to quit: 51%
  - Quitting smoking is too stressful for these patients: 38%

Shéa et al. (2016). Addiction

PSYCHIATRY RESIDENTS’ (N=105) ENGAGEMENT in the 5-As

<table>
<thead>
<tr>
<th>Activity</th>
<th>Often or Always</th>
<th>Sometimes</th>
<th>Never or Rarely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ask about smoking</td>
<td>65%</td>
<td>30%</td>
<td>5%</td>
</tr>
<tr>
<td>Advise to quit</td>
<td>94%</td>
<td>6%</td>
<td>0%</td>
</tr>
<tr>
<td>Assess readiness to quit</td>
<td>35%</td>
<td>58%</td>
<td>7%</td>
</tr>
<tr>
<td>Assist with quitting</td>
<td>35%</td>
<td>58%</td>
<td>7%</td>
</tr>
<tr>
<td>Arrange follow-up</td>
<td>53%</td>
<td>39%</td>
<td>8%</td>
</tr>
</tbody>
</table>

Source: Prochaska, Fromont et al., 2005. Acad Psychiatry

2008 American Psychiatric Nurses Association Survey

- 85% Ask about tobacco
- 61% Refer patients for tobacco cessation
- Only 29% of respondents’ agencies offer tobacco cessation treatment

TRUTH: TOBACCO INDUSTRY DOCUMENT

A LEGACY OF DENIAL

- Archive of 14 million documents created by tobacco companies about their advertising, manufacturing, marketing, scientific research and political activities
- Hosted by the UCSF Library and Center for Knowledge Management

Truth Library: http://legacy.library.ucsf.edu

Let’s face facts: Cigarette smoke is biologically active. Nicotine is a potent pharmacological agent. Every toxicologist, physiologist, medical doctor and most chemists know that. It’s not a secret.

1982 Memo by Philip Morris researcher Thomas Osdene

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TOBACCO INDUSTRY’S INTERESTS

- 1950s-1980s: Beliefs that patients with schizophrenia, who smoke at high rates, immune to cancer


TOBACCO INDUSTRY’S INTERESTS

- 1960s-1970s: TI funded research on psychosomatic causes of cancer
  - Proposed those who denied or repressed grief were more likely to develop cancer than those who expressed emotion
  - "Longterm schizophrenics, outwardly calm, have no capacity for the repression of significant emotional events and no need to contain emotional conflict."
  - Ultimately came under scrutiny for its "scientific integrity"


TOBACCO INDUSTRY’S INTERESTS

- 1964 & 1997: TI denied funding of 2 proposals to examine high rates of cancer in smokers with mental illness
  - 1964 proposal "denied in principle but referred to the study group on the psychophysiological aspects of smoking.""for working over."
  - Questioned "whether some other kind of use could profitably be made of his data collection methods."


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HOSPITAL SMOKING BANS

JCAHO ultimately "yielded to massive pressure from mental patients and their families, relaxing a policy that called of hospitals to ban smoking.”

Nicotine: helping those who help themselves?

3 July 1996

John A. Borkman

Many people who use tobacco, including smokers, do so because of some potential therapeutic benefit they receive, such as to relieve depression, schizophrenia or pain. While this

Nicotine may have beneficial effects that are ‘therapeutic’ rather than addictive

Addiction or self-help?

Tobacco industry documents indicate the author received funding from CTR and PM from at least 1977-1994 and contributed to papers conceived by PM

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LD 463 - An Act to Exempt Substance Abuse and Psychiatric Patients from the Prohibition against Smoking in Hospitals

We felt the event was a success financially as well as educationally. Many in our community heard for the first time how important a program such as Wellspring House is for the well-being of young schizophrenics and for Louisville.

We also felt our honored guests, Kentucky's lawmakers, were truly educated and impressed.

We are presently working with Seven Counties Services and the Mental Health Association and within a few weeks will send you a report on the progress of our program. Without your support we would be making no such plans. For this, again, our thanks.

Interoffice Memorandum

Date: November 14, 1974

From: R. Miller

To: Peter Allen

Attached is a request for cigarettes for Operation Santa Claus. This is the largest we have made donation to over the years, and last year we entered 60 cartons.

I hope for a very successful season this year and would have to be changed in the same order does not have sufficient budget.

Your comments would be appreciated.

RJ Reynolds Project

Sub Culture Urban Marketing

BACKGROUND:

During the introduction of Red Kamen, additional opportunities to improve Camel promotions became evident in San Francisco proper.

1. Consumer Subculture
   - Alternative Life Styles
   - International Subculture
   - Street People - More Appetite to Demand

2. Camel has a higher share than the general Marketshare. This was consistent in all the tested markets.

References

RJR Project

Sub Culture Urban Marketing

Schizophrenic.

The New Wave - We've got them down to a science.
Annual return of 20.6% per year for nearly half a century

SOURCE: S&P CAPITAL IQ

ADDICTION SELLS: World’s Most Successful Company

$1 invested in tobacco stocks in 1900 was worth $6.3 million by 2010

$8.2 Billion per year (91% of TI marketing dollars)

$25 million a day

National sample of 2230 tobacco retailers
81% sold flavored cigars
>95% of stores displayed tobacco marketing
Average store featured 29.5 marketing materials
3 in 4 stores displayed a tobacco product price promotion
87% of gas/convenience stores and 85.5% of pharmacies
17% featured marketing below 3 feet
Price promotions were more common in neighborhoods with more residents under age 18 and African American

Ribisl et al. (2017) Prev Med

GREATER TOBACCO RETAILER DENSITY

Associated with...

Greater:
Psychosis 500m: \( \beta = 2.9, p < .01 \); 1km: \( \beta = 2.5, p = .01 \)
Self-harm 500m: \( \beta = 2.6, p = .01 \); 1km: \( \beta = 2.1, p = .03 \)
Interpersonal problems 500m: \( \beta = 2.0, p = .04 \)
Nicotine dependence 500m: \( \beta = 3.0, p = .01 \)

Lower:

Self-efficacy 500m: \( \beta = 2.1, p = .01 \)
Motivation/Stage of Change: PC vs. C, \( \beta \)

Young-Wolf, Henriksen, Delucchi & Prochaska (2015). AJPH

RESIDENTIAL EXPOSURES

Tobacco retailer density near persons with Serious Mental Illness living in SF Bay Area – 2xs more dense than average

Median # of retailers within the service areas of participants’ residences was: 3 (within 500m) and 12 (within 1km)
Median distance to a retailer was: 247m (IQR: 115, 527)

Young-Wolf, Henriksen, Delucchi & Prochaska (2015). AJPH

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CIGARETTES ARE MY GREATEST ENEMY

- Statewide social marketing campaign in California by Billy DeFrank Lesbian and Gay Community Center, the Center OC, and the American Legacy Foundation
- Real-life triumphs over adversities to quit smoking

CDC TIPS FOR FORMER SMOKERS CAMPAIGN: DEPRESSION & SMOKING

Real-life triumphs over adversities to quit smoking

CDC TIPS FOR FORMER SMOKERS CAMPAIGN: DEPRESSION & SMOKING

- Rebecca struggled with depression. She thought smoking would help, but it just made her more depressed. Then she quit smoking, and her life, mentally and physically, turned around. She now runs daily and hopes to live for a hundred years. You can quit smoking. For free help call 1-800-QUIT NOW.

https://www.cdc.gov/tobacco/campaign/tips/partners/health/mental/index.html

BUSINESS OR EXPLOITATION: MENTAL ILLNESS

- https://www.youtube.com/watch?v=Qf06zBM

CONTRIBUTING FACTORS: SUMMARY

- Tobacco products are effective delivery systems for the highly addictive drug nicotine.
- Nicotine activates the dopamine reward pathway in the brain, which reinforces continued tobacco use.
- Tobacco use disorder is a DSM5 psychiatric disorder.
- The Tobacco Industry targeted marketing to individuals with mental illness and denied harms.
- Tobacco dependence involves biological, psychological, social, systemic and treatment factors requiring a long-term multifaceted treatment approach.