Promoting Nonsmoking:
A Central Part of Diabetes Management

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The Robert Wood Johnson Foundation

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Worldwide Tobacco

- 500 million of those alive today will be killed by tobacco
- Male prevalence:
  - 35% in developed countries
  - 50% in developing countries
Why Smoking and Diabetes??

Yearly Deaths Attributable to Smoking in US

- About 1 in every 7 or 8 deaths
- Total 442,398
- Cancer of Lung, Trachea, Bronchus 124,813
- Cardiovascular Disease 148,605

Why Smoking and Diabetes??

Among Adults with Diabetes, Smoking Associated with increased:

- Death by coronary heart disease
- Diagnosis of coronary artery disease
- Stroke
- Nephropathy
- Neuropathy

American Diabetes Association

*Diabetes Care* 2002 25: S80-S81

- The cardiovascular burden of diabetes, especially in combination with smoking, has not been effectively communicated to both people with diabetes and health care providers.

- Only about half of individuals with diabetes are advised to quit smoking by their health care providers.
Smoking is Simple

- Hand
- Mouth
- Inhale constituents
- x 20+ years
- Disease and Death
Smoking is Complex

- Genetics
- Psychophysiology of nicotine metabolism
- Personality and affect
- Social influences – peers, families, communities
- Economic influences
- Organizational influences
- Legal influences
- Marketing -- Economics of Smoking -- International Trade
Conditioning of Smoking

• Reinforcing Effects
  – Euphoriant -- mood elevating
  – Anxiolytic -- anxiety reducing
  – Stimulant
• Rapid delivery
  – 7 sec from inhalation to CNS
• Rapid clearance
• Thus, subtle titration
• Over 1 million conditioning trials in 20-year Hx
  7 puffs x 20 cigs x 365 days x 20 yrs = 1,022,000
Addiction & Conditioning Aggravate Each Other

1. Strength of Nicotine → Stronger Links to Situations
2. Variety, Number, Emotional Nature of Situations → Stronger Addiction to Nicotine
Smoking and Distress

- More common among those who are depressed
- Quitting less likely among those who are depressed
- For sex and marital status, prevalence highest among divorced/separated men: 48.2% (Surg Gen Rept 1988)
  - Parallel to alcoholism, suicide
- Mental health outpatients (Hughes et al 1986):
  - 88% among schizophrenics
  - 49% among depressed
- 76% of male users of soup kitchen (McDade & Keil, 1988)
Prevalence of Smoking among US Adults by Education (< 12th, ≥ 16th), 1966 – 2001

Lack of Awareness of Risk

• Among auto accidents, HIV, homicide, air pollution, and smoking
  – only 22% of adults rated smoking as #1 cause of death
  – only 17% among smokers
(American Lung Assoc, Gallup Org, 1992)

• Among adults with diabetes
  – “I have diabetes, I don’t have to worry about cancer”
  – “Smoking helps keep my weight down”
  – But smoking increases risk of CVD, most likely cause of death among those with diabetes

How to Help People Quit Smoking
State-of-the-Art for Smoking Cessation

• Quit date
• Extinguish key cues prior to quitting
• Plan for coping with temptations to relapse
• Cooperation and encouragement from family and friends
• Continued follow-up and encouragement from professionals
• Relapse prevention/Renewed efforts
  – Average successful quitter has relapsed 2 - 4 times
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| Skills for quitting and staying quit | ALA’s Freedom From Smoking ®  
ADA Materials and self-help manuals |
| Follow Up and Support     | Support lines  
Attention in diabetes support groups                                              |
| Community Resources       | Understanding of importance by family, friends  
Clean indoor air regulations  
Media Attention               |
| Continuity of Quality Clin Care | Rx for Zyban®, Nicotine replacement  
Follow up and referral |
Individualized Assessment
Smoking as A Vital Sign in Encounter Form

Indicate Smoking Status

___ Never smoked (less than 100 in lifetime)

Ex-smoker

___ More than 2 years   ___ Less than 2 years

Smoker

___ Planning to quit in next month
___ May quit in next 6 months
___ No plan to quit
Collaborative Goal-Setting
“5 A’s”

1. Assess
2. Advise
3. Agree
4. Assist
5. Arrange
Assess Smoking

• Understanding of risks of smoking
• Check: Understand enormity of risk???
• Smoking patterns of family, friends
• Smoking, smoking related diseases, and alcohol abuse among parents, grandparents
• Previous and planned quit attempts
Advise to Quit

• Precontemplation – Not thinking about quitting
  – Quitting is most important thing can do to protect health – including diabetes management
  – Low-key re: risks
  – *Promise of help*

• Contemplation – Maybe in next 6 months
  – Pros (not Cons)
  – Emphasize doable
  – Overview of quitting
Advise to Quit #2

Tailor advice to:

Importance of quitting in diabetes
Previous answers
– If underestimate risk: enormity of risk
– If pessimistic: avg. quitter relapses 2 - 4 times, thus, “you can too”

Current symptoms
Lifespan phase (e.g., new parents)
Assist

• Emphasize doable
• Overview specifics of Action plan:
  Step #1 — Set Quit Date
  Step #2 — Using Medications
  Step #3 — Staying Smoke Free
    Plan for dealing with temptations
    Recruit support and encouragement
  Step #4 — Rehearse response to lapse
    Lapse Paradox
Skills for Smoking Cessation
Skills

• Setting Quit Date – Individualized
• Coping with Temptations – Key is specific plans made ahead of time (Problem solving skills)
• Relapse prevention
  – Keeping lapses from becoming relapses
  – Avoiding lapses from premature sense of success
• Media Choices
  – Self help (video, web based, self-help manuals)
  – Groups – Freedom from Smoking®
  – Local Lung Association (white pages) for self-help and groups
  – 800 – 4 – CANCER for self-help materials
  – ADA – materials for smokers with diabetes
Follow Up and Support
Follow Up and Support -- Arrange Follow-Up

- Physician, staff member, volunteer, Promotora, CHW
- Phone, face-to-face, e-mail, web
- Timing
  - 24 - 48 hours post quit
  - 7 - 14 days
  - Ongoing prn
- Review:
  - Coping with temptations
  - Cooperation from others
  - Don’t be undone by success
Community Resources
• Individuals are more likely to quit if norms in community support quitting

• Advertisements stimulate quitters’ associations with smoking
  • Relaxing
  • Tough
  • Cool
  • Sexy

• Ongoing support from family and friends more likely in community that understands importance of not smoking
Neighbors for a Smoke Free North Side

Neighborhood and Peer-Based Promotion of Nonsmoking

24-month program

Run through Grace Hill agency

Steering Committees in each Neighborhood

Diverse activities: mass media, door-to-door, self-help manual, billboards

Local development of materials, e.g., local revision of ALA brochure featuring neighborhood residents and their quotations
Neighborhood Tailoring of Intervention

• American Lung Association:
  – Brochure: *Don’t Let Your Dreams Go Up in Smoke*

• Neighborhood Steering Committee:
  – *Don’t Let Your Lives Go Up in Smoke*
  – Neighborhood residents and their own words
  – “I took a look at the billboards in my neighborhood, especially near the schools. Guess what -- those smiling people pushing cigarettes were all Black. The tobacco companies are using Black people to sell their drugs to other Black people. What is going ON?”
Neighbors for a Smoke Free North Side

Evaluation by random-digit surveys in

- Kansas City Comparison Neighborhoods
- St. Louis Intervention Neighborhoods
- St. Louis <$20,000 Annual Income

Fisher et al.
Am J Public Hlth
1998 88: 1658-1663
Continuity of Quality
Clinical Care
Zyban® very similar to Welbutrin®

- Antidepressant mimics nicotine in the brain
- Not limited to those who are depressed
- May “uncover” depression – individual switches from Nicotine for depression to Zyban®

Nicotine Replacement

- Gum, patches OTC
- Inhaler by Rx

Ongoing Follow Up

- Should continue to praise and assess for many years
Population Approaches
Key Fact in Smoking

• No intervention is successful with 50% of those to whom applied
• Approximately 50% of adult, regular smokers in US have quit
• Average successful quitter has failed 2 - 4 times
• *Aggregate of multiple interventions*
Population Approaches

- Taxation
- Public education and counter-marketing
- Community based coalitions
- Services for smoking cessation
- Smoking prevention aimed at youth
- Multicultural programs
Effects of California Campaign on Consumption

Solid line = actual
Dashed line = projected on basis of trends in other states
Dotted = projected if no trimming of program in 1992

Fichtenberg & Glanz, NEJM 2000 343: 1772-1777
Effects of California Campaign on CVD Mortality

Solid line = actual
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