



Facilitator Training: Tobacco Cessation

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Presented by:
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Introductions

- Name
- Organization
- Experience helping people quit smoking
- One thing you hope to get out of the training

Acknowledgments

- Center for Tobacco Cessation
 - Shu-Hong Zhu, Principle Investigator
 - Christopher Anderson, Project Manager
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Objectives

- Understand principles of change for addictive behavior.
- Identify factors that affect smoking uptake, maintenance, cessation & relapse prevention.
- Expand knowledge and skills in providing smoking cessation counseling.
 - Including special populations (pregnant smokers, teens, smokers with mental illness and substance use disorders)
 - Group settings

Why Do People Change?

Why Do People Change?

- They want to
- They have to
 - In reality, do more people change because they want to or because they have to?
- If they don't have much of either, then they don't change.

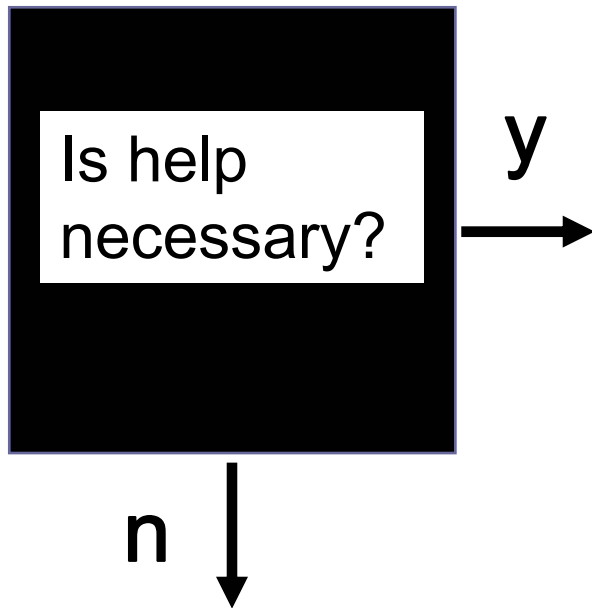
How Do People Change?

How Do People Change?

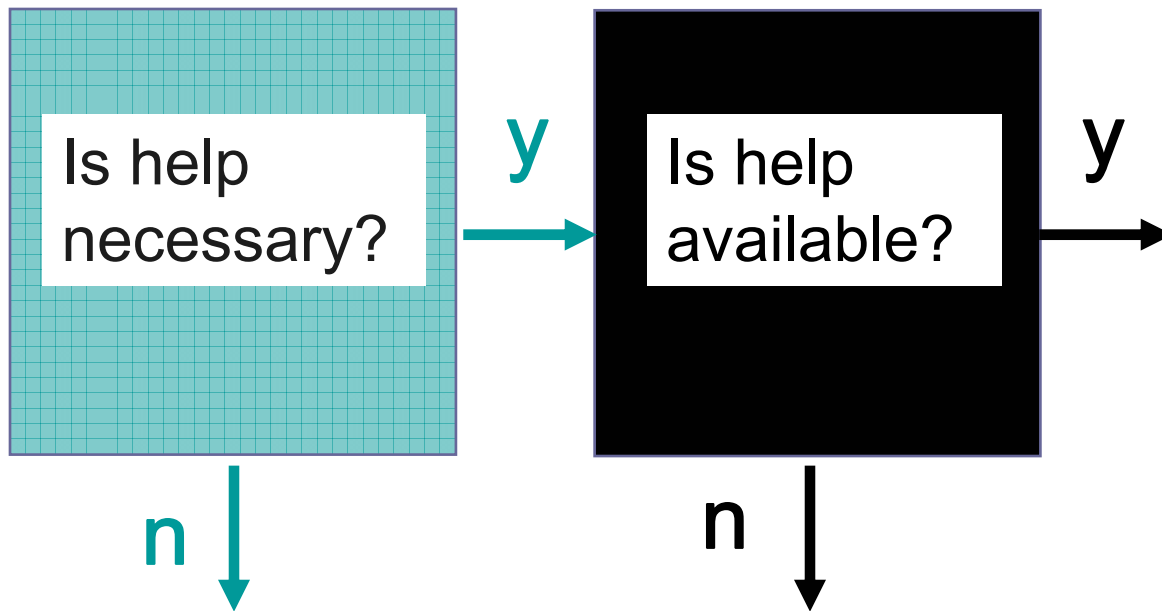
- A strong enough reason
- Belief in their ability
- A solid plan (ahead of time)
- Some degree of accountability

- They will also benefit from support/help
 - But will they seek help?

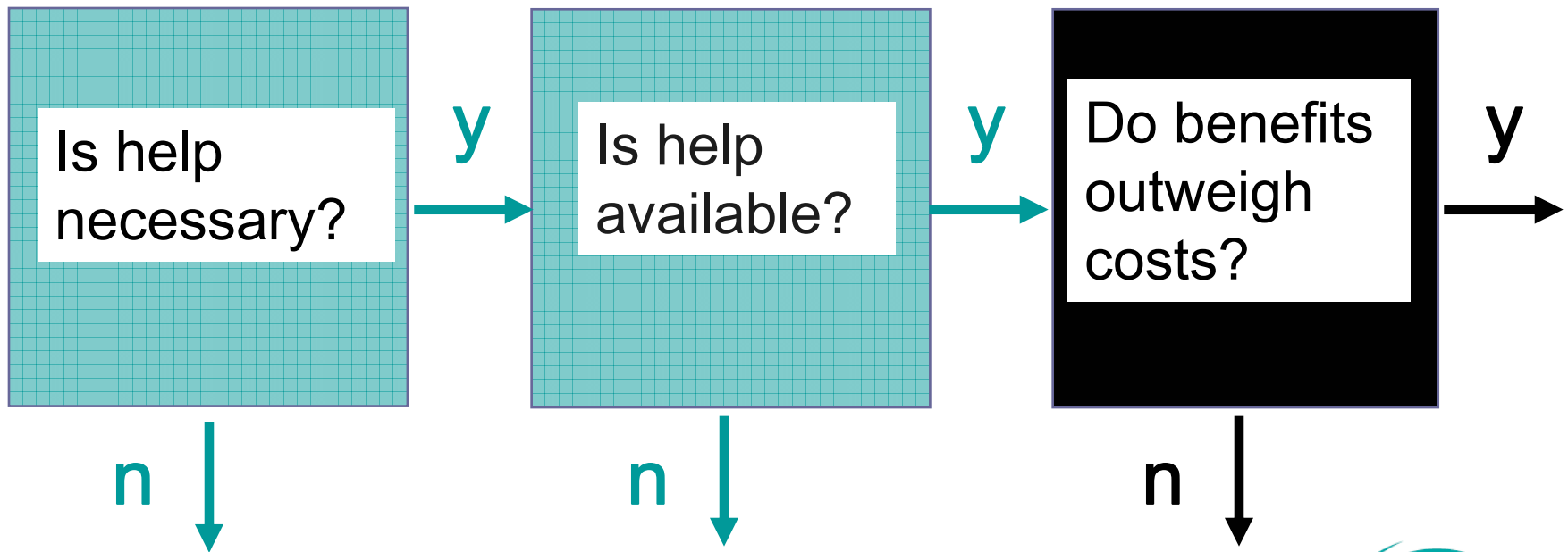
A Decision Model for Help Seeking



A Decision Model for Help Seeking



A Decision Model for Help-Seeking



How People Change (cont.)

- Decision making process
 - Help seeking behavior
 - Making an attempt to change

$$P = R \times Se$$

(Probability = Reason X Self-efficacy)

The Psychology of Smoking Cessation

- Why do people smoke?
- Models of addiction
- Process of quitting
- Process of relapse

Why Do People Start Smoking?

- Habit formation
 - Experimentation
 - Social Pressure
 - Observation

Why Do People Keep Smoking?

- Habit maintenance

- 1) Utility

- Self-medication
- Instrumental
- Availability

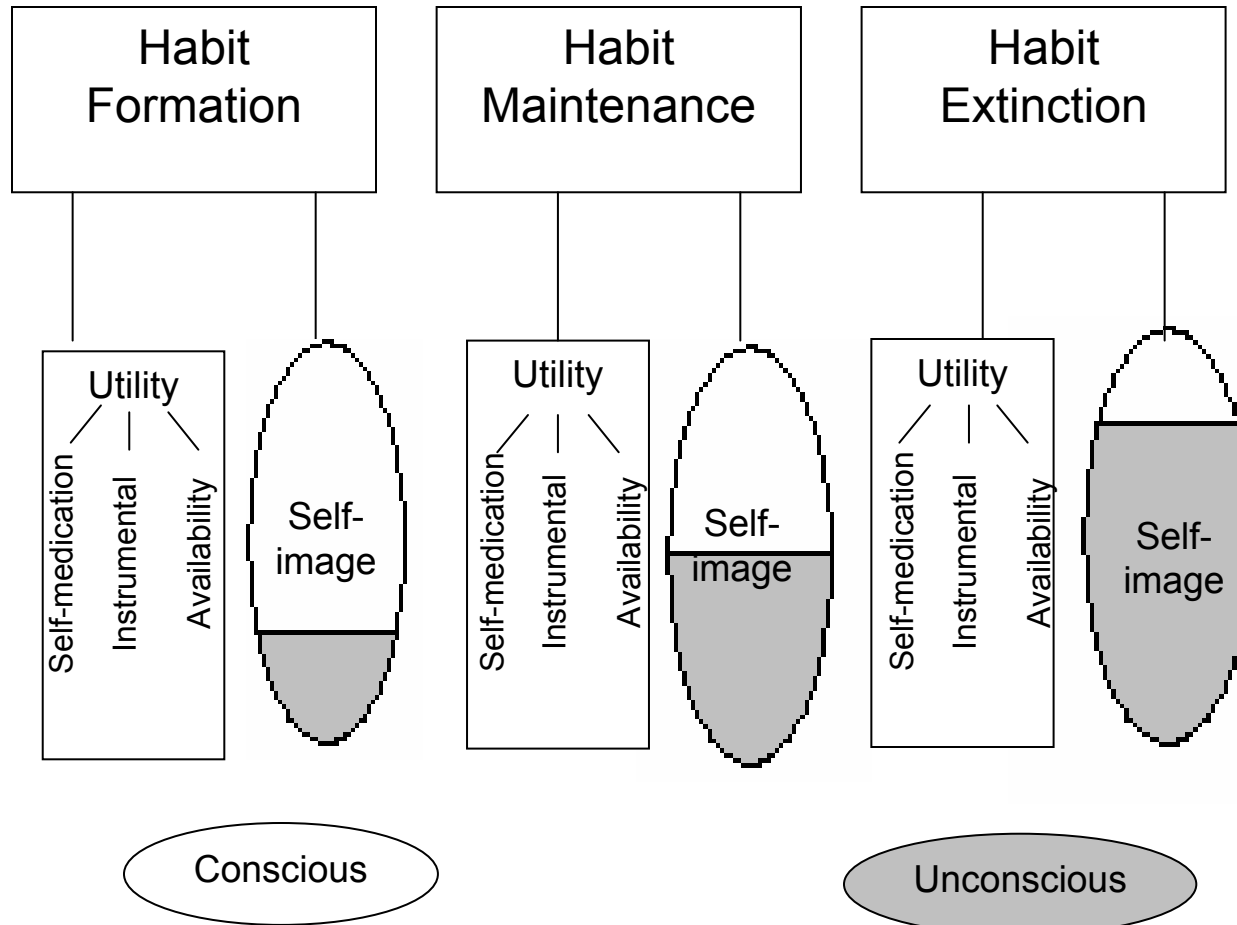
- 2) Self-image

- Conscious
- Unconscious

Why Do People Quit?

- Habit extinction
 - Health
 - Family
 - Social
 - Cost
 - Control

Habit Formation, Maintenance, & Extinction



What Makes it Hard to Quit (and stay quit)?

- Ambivalence
- Habit
- Psychological dependency
- Physical dependency

Models of Addiction

Responsible for the solution?

Responsible for the problem?

Yes

No

Yes

Moral
Model

Compensatory
Model

No

Enlightenment
Model

Disease
Model

Shared Responsibility Model

- Both internal and external factors
- Smoking is a learned behavior
- Motivation + Planning = Success

How Do People Quit?

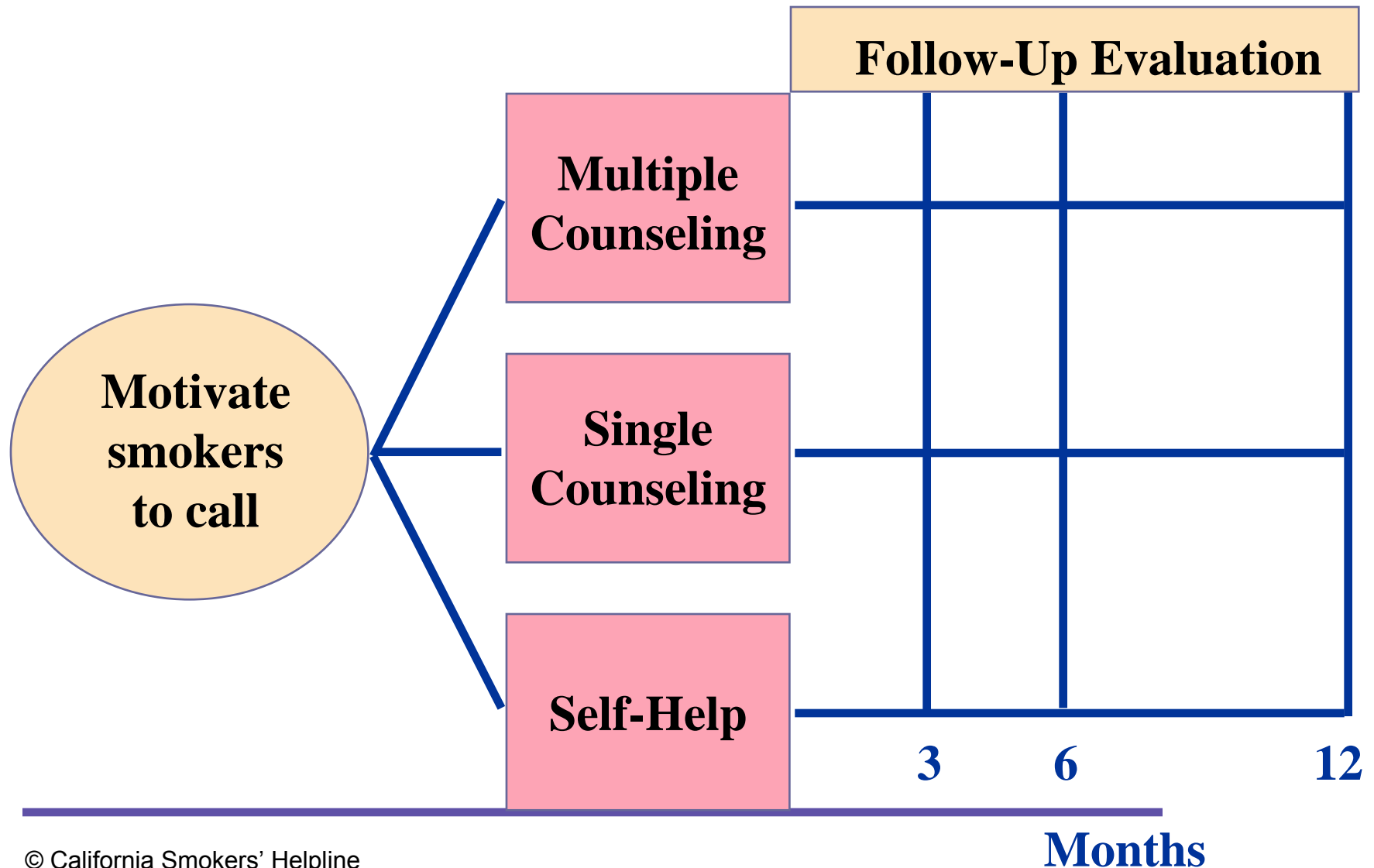
- Use more than willpower
 - Motivation & Planning
- Make several attempts
- Deal with slips and relapses
- Adopt a nonsmoker self-image

How to Increase Cessation

- Increase the rate of quit attempts
- Increase probability of survival (staying quit) after attempts

$$Q = A \times S$$

A Randomized Trial



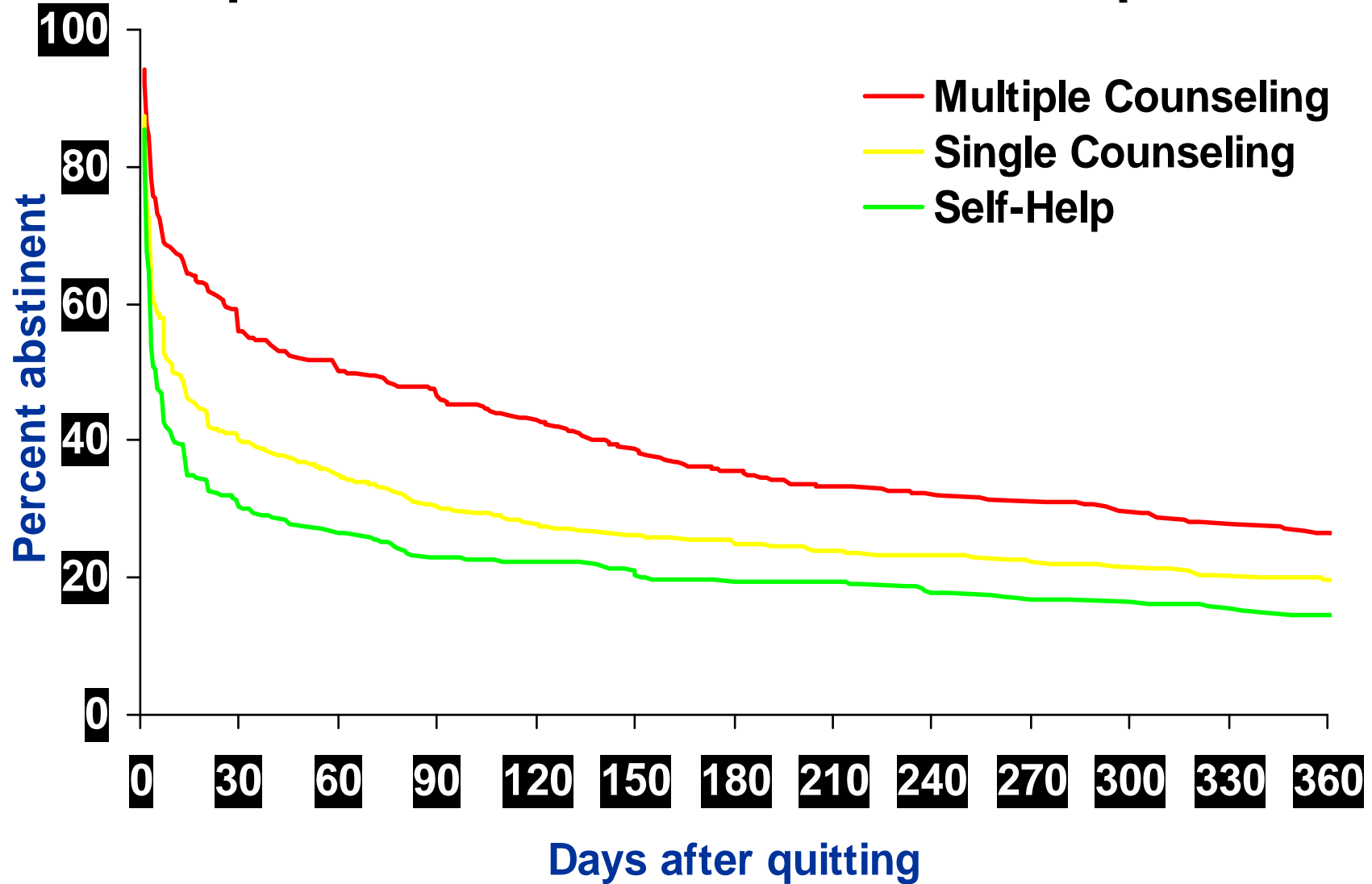
Quit Attempts

Treatment Group	Quit in 3 Months %
Self-Help	58.8
Single Counseling	66.7
Multiple Counseling	66.6

Source: Zhu et al. (1996), *JCCP*, 64, 202-211



Relapse Curves for 3 Groups



Source: Zhu et al. (1996), *JCCP*, 64, 202-211

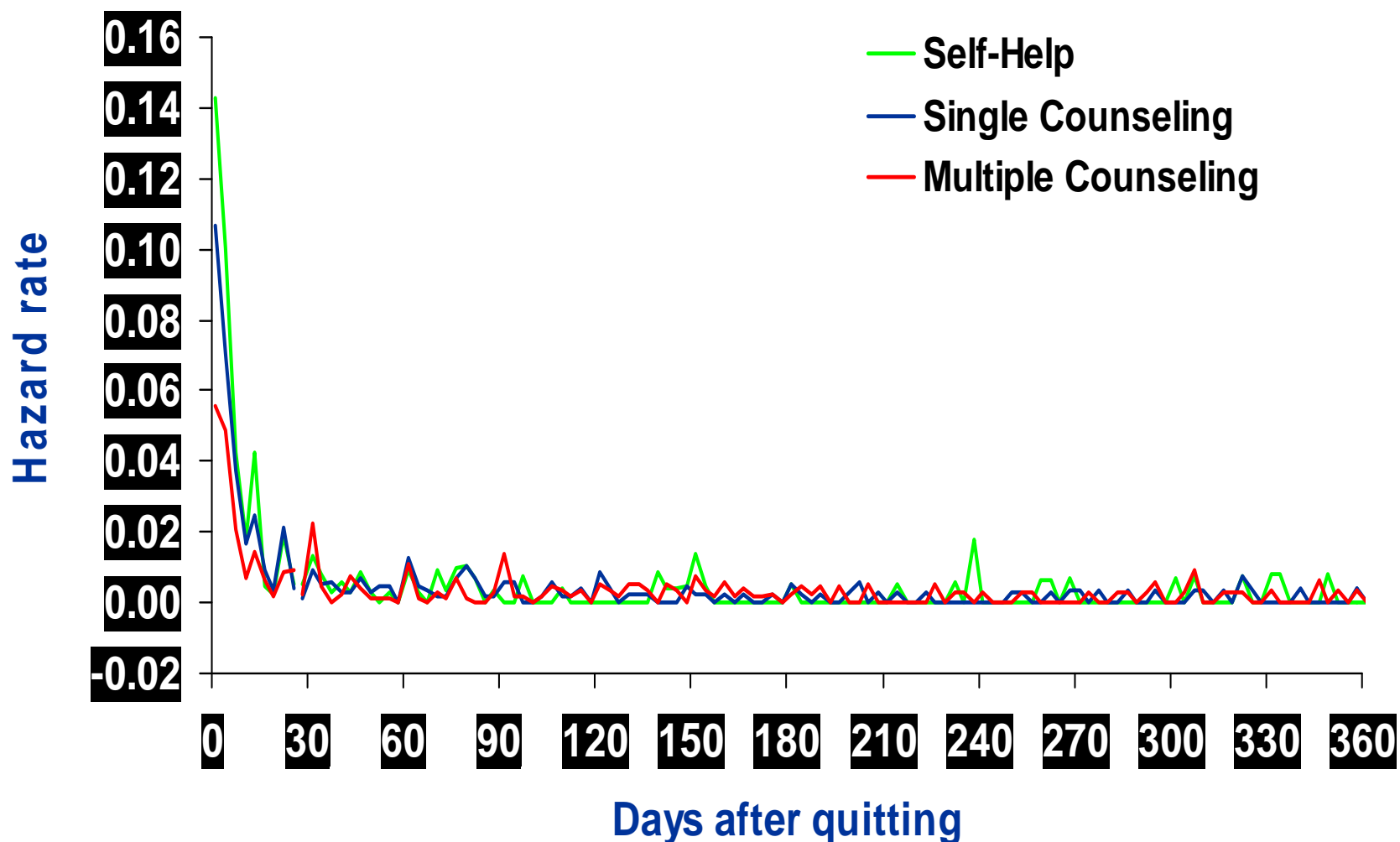
12-Month Abstinence and Median Length of Abstinence

Treatment Group	12-month Abstinence rate (%)	Median length of abstinence (Days)
Self-Help	14.7	5
Single Counseling	19.8	11
Multiple Counseling	26.7	63

Source: Zhu et al. (1996), *JCCP*, 64, 202-211

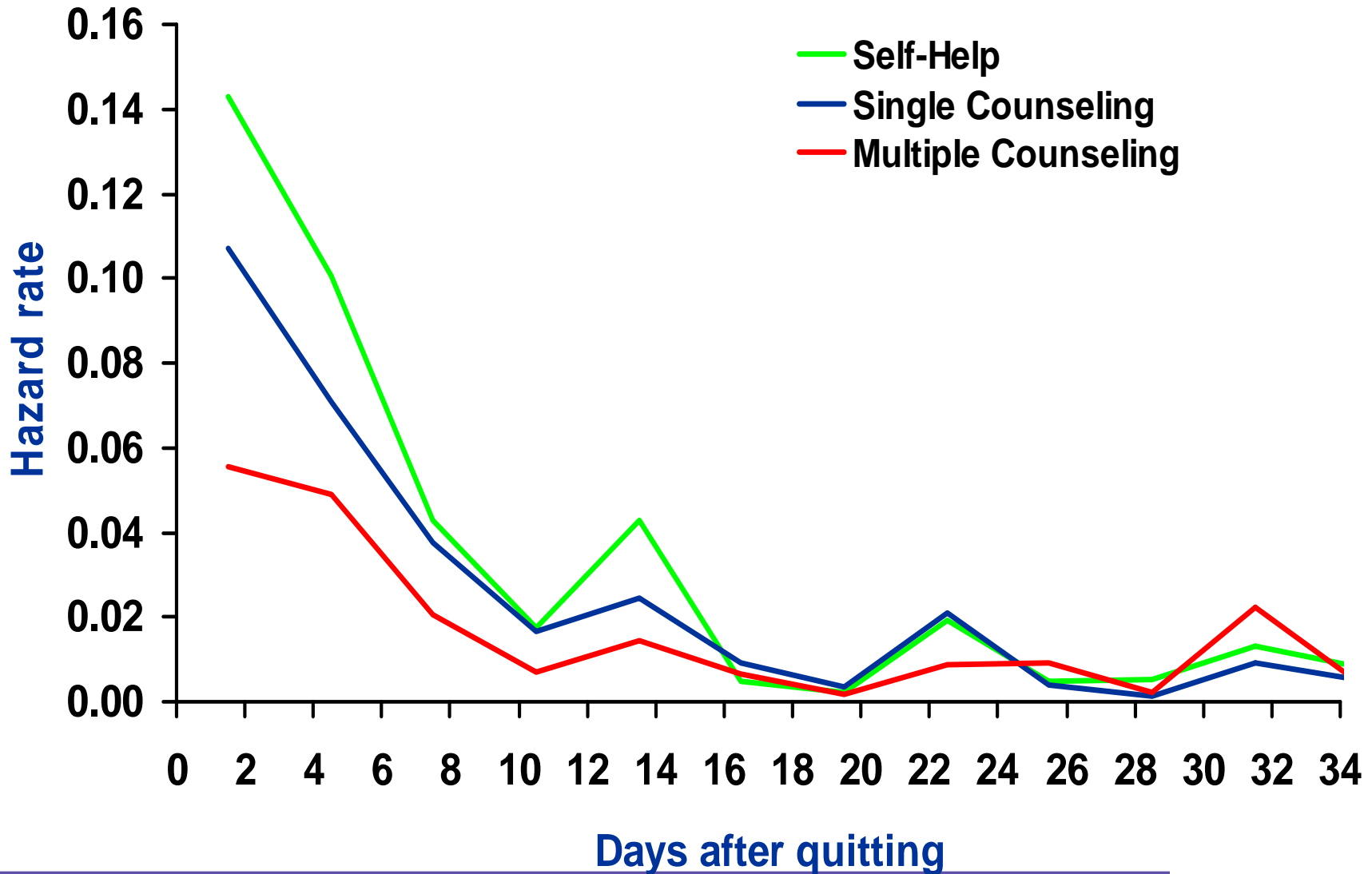


Hazard Rates Over 12 Months



Source: Zhu et al. (1996), *JCCP*, 64, 202-211

Hazard Rates Over 30 Days



Source: Zhu et al. (1996), *JCCP*, 64, 202-211

How do you design a counseling protocol that will affect quit attempts, prevent relapse, or both?

3 Key Considerations

- How many sessions?
- How should they be scheduled?
- What should happen in each session?

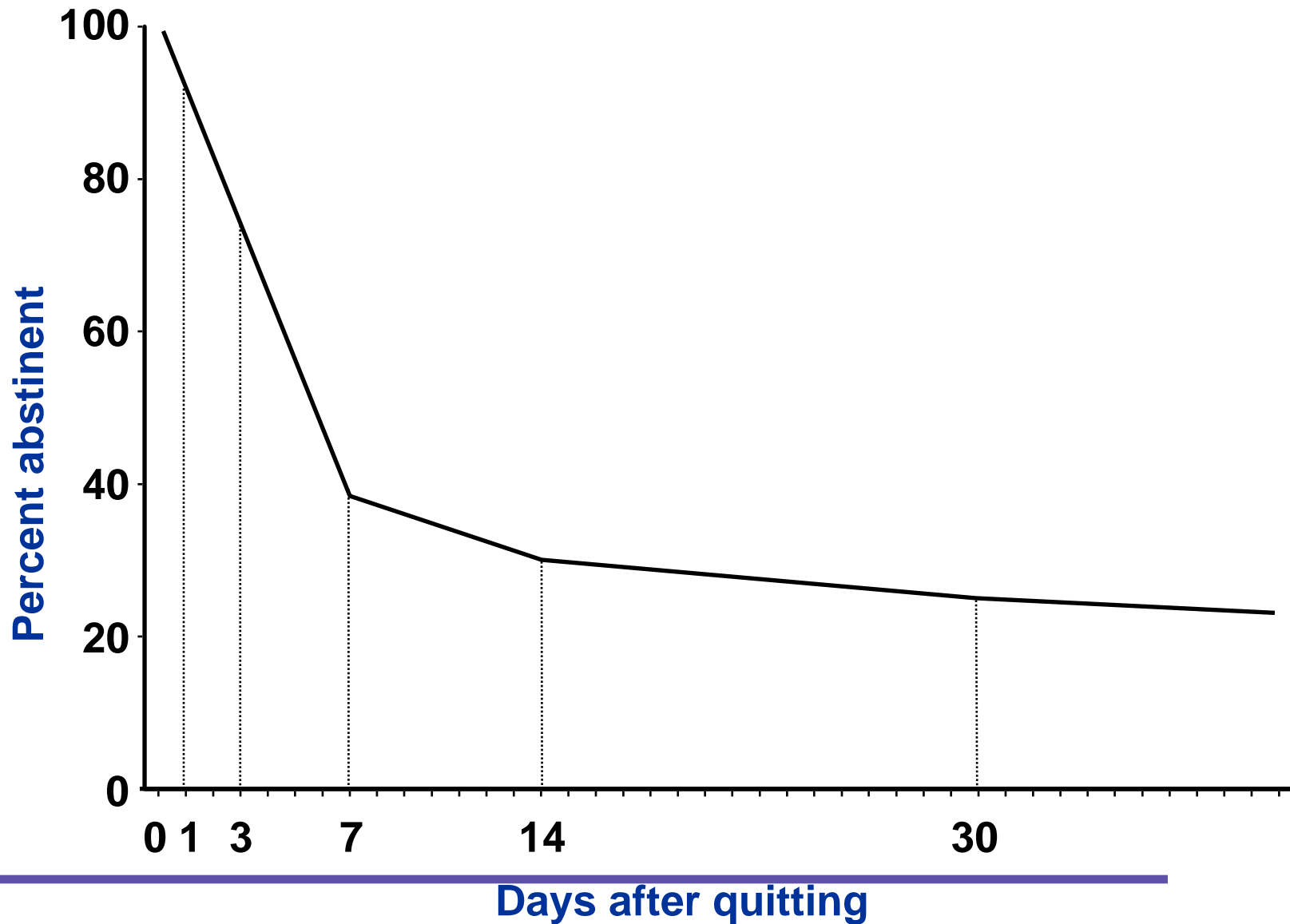
How Many Sessions?

- From a quit attempt standpoint, one session may do the job.
 - Address the essential elements
 - Lead to a quit date
- From a survival standpoint, multiple sessions can help.
- People with fewer resources benefit most from more contact.

How Should They Be Scheduled?

- From a motivation standpoint, strike while the iron is hot.
- From a relapse prevention standpoint, schedule contacts based on the probability of relapse.

Relapse-Sensitive Scheduling



Source: Zhu & Pierce (1995), *Prof. Psych. Res. & Practice*, 26, 624-625

How Should They Be Scheduled?

- From a motivation standpoint, strike while the iron is hot.
- From a relapse prevention standpoint, schedule contacts based on the probability of relapse.
- From a recycling standpoint, spread contacts over several months

Counseling Smokers

- Increase nonspecific counseling effects
- Apply specific counseling effects
- Consider counselor style
- Address appropriate counseling topics
(Counseling protocol)

Nonspecific Effects

- Instill hope
- Establish good rapport
- Increase motivation
- Boost self-efficacy
- Encourage social support
- Address ambivalence & create accountability
 - Proactivity

Proactivity

- Addresses client ambivalence
- Reduces attrition
- Provides social support
- Creates accountability

Specific Effects

- Share knowledge
 - Educate about the quitting process
 - Provide facts about tobacco & nicotine
 - Offer a menu of pharmacotherapy options

Specific Effects (cont.)

- Facilitate Planning
 - Behavioral (e.g., changing habits)
 - Cognitive (e.g., self-image)
 - Mental health & substance use issues
 - Pharmacological (e.g., NRT)

Counselor Style

- Directive vs. Supportive
- Expert vs. Facilitator
- Motivational Interviewing

Motivational Interviewing

- Developed by William Miller & Stephen Rollnick
- Born from alcohol dependency counseling
- Not overtly confrontational or directive
- Clients experience being guided in own decision making, not “counseled”

Goals of Motivational Interviewing

- Reduce harmful behavior
- Explore & resolve ambivalence about change
- Increase self-efficacy for change
- Guide client in own decision making
- Empower client to choose change

Principles of Motivational Interviewing

- Express Empathy
- Avoid Argumentation
- Roll with Resistance
- Support Self-efficacy
- Develop Discrepancy

Self-Motivational Statements

- Problem Recognition
 - I have a problem with smoking.
- Expression of Concern
 - I am worried about my smoking.
- Intention to Change
 - I plan to do something about it.
- Optimism for Change
 - I think I can do it.

Eliciting Self-Motivational Statements

- Evocative Questions

Sample Evocative Questions

- What kind of problems are you having with smoking?
- In what ways has smoking been a problem?
- What has smoking stopped you from doing?
- What worries you about your use of tobacco?
- What are others concerned about your smoking?
- What do you think will happen if you don't make a change?
- What would be some advantages to being a smoker?
- If you were 100% successful what would be different?
- What makes you think you could change?
- What would it take for you to move from 30 to 20 (10 to 5) cigarettes?
- How does smoking fit in (interfere) with what you want to become?
- What has gotten in the way before?

Eliciting Self-Motivational Statements

- Evocative Questions

- Decisional Balance

- What is good and not so good about smoking?

- Using Extremes

- What is the worst that could happen (worst fear)?

- Looking Forward

- What do you think will happen in 10 years if there is no change?

Motivational Interviewing

Example Session

Counseling Protocol

Counseling Protocol

- Initial session
 - Most comprehensive
 - Preparation to quit
- Follow-up sessions
 - Shorter than the initial session
 - Relapse prevention

Initial Session

- Treatment overview and rationale
 - Provide rationale for counseling
 - Build credibility
 - Set expectations
 - Instill hope

Initial Session (cont.)

■ Motivation

□ Clarify reasons

- Tell me some of your reasons for quitting now.
- How do you think smoking affects your health?
- What do you know about the health benefits of quitting?
 - Are you taking medication for any reason?
- Other concerns (family/children, cost)?

□ Identify ambivalence

- What do you like about smoking?
- What don't you like about smoking?

Initial Session (cont.)

- Smoking History

- Assess level of addiction and smoking pattern
 - How many cigarettes do you smoke now?
 - Has there been any change in your smoking?
 - Have you ever tried to quit altogether?
- Explore triggers & bolster self-efficacy
 - Last time? Longest time?
 - Relapse situation? Methods? Success?

Initial Session (cont.)

■ Physical Considerations

□ Address misinformation & normalize withdrawal

- What do you know about how nicotine affects the body?

□ Provide information

- What do you know about quitting aids like NRT, bupropion, & chantix?
- What quitting methods would you like to use?

Initial Session (cont.)

- Environmental Considerations
 - Identify environmental triggers
 - Are there any other smokers in the home?
 - Encourage a home ban, if needed.
 - Are there any rules about who can smoke in the home and where they can smoke?
 - Address social expectations
 - What about other situations like work or family/social gatherings?

Initial Session (cont.)

■ Familial & Social Support

- Assess client's level of social support
 - Do your family and friends know about your decision to quit smoking?
 - Are there any people in your life who are supportive?

- Encourage client to build support base
 - Are you involved in any support groups or are there any counselors or doctors you are talking to currently?
 - Who could you talk to about quitting if you have a craving for a cigarette?

Initial Session (cont.)

- Confidence & Willpower

- Assess client's confidence level
 - How confident are you that you can quit for good?
- Respond to client's attitude about willpower and quitting if appropriate
- Reframe need for willpower/confidence to a need for planning

Initial Session (cont.)

■ Self-image

- Introduce the concept of the nonsmoker self-image
- Assess how integral cigarettes are to the client's self-image
- Assist clients in defining themselves without cigarettes
 - Now let's go back to the time when you quit for **one month**, did you feel like you were a nonsmoker?

Initial Session (cont.)

- Problem Solving & Planning
 - Provide rationale for planning
 - Boost self-efficacy
 - Begin planning
 - When you quit smoking, what will be some of the most challenging situations when you'll want to smoke (triggers)?

Initial Session (cont.)

- Session Summary

- Pull together major ideas covered in the session

- Motivation
- Planning
- Environmental considerations
- Self-efficacy
- Social support
- Self-image
- Pharmacotherapy

- Reinforce understanding of major ideas

Initial Session (cont.)

- Setting a Quit Date & Addressing Follow-up
 - Commit to a plan
 - Commit to a quit date
 - What day in the next week or two would be a good one for you to quit (weekday vs. weekend)?
 - Discuss pre-quit strategies
 - Provide rationale for follow-up sessions

Quit Day Session

■ Quit Status

- Determine what action the client has taken and how the plan is working
 - How is everything going?
 - How is your plan working?

- For aborted quit attempts or relapse, determine what happened and reestablish quit date
 - What happened?
 - What would you like to do now?

Quit Day Session (cont.)

■ Withdrawal

- Assess client withdrawal, if any
 - How have you been feeling?
 - Have you noticed any withdrawal symptoms (physical or emotional problems caused by quitting smoking)?
- Normalize withdrawal symptoms and, if needed, dispel myths about getting sick because of quitting

Quit Day Session (cont.)

- Pharmacotherapy (if appropriate)
 - Determine use of quitting aids, assess proper use
 - Did you start using your quitting aid?
 - What brand are you using?
 - When did you start using it?
 - What dosage are you on?
 - How long will you be at this level?
 - Have you noticed any side effects?
 - Discuss proper use and refer to MD if needed
-

Quit Day Session (cont.)

■ Challenging Situations

- Bolster self-efficacy
 - What situations have been most challenging (that you've handled successfully)?
- Address Abstinence Violation Effect (A.V.E.)
- Review predicted trigger situations from initial session
- Support internal strengths that have enabled client to be successful

Quit Day Session (cont.)

■ Slips & Relapse

- Identify any smoking events
 - Have you smoked at all (or even had a puff) since you quit?
 - *If needed*, what happened? What was the situation just before you smoked?
 - Have you smoked at all since then?
 - The next time that situation comes up, how might you handle it?
- Normalize slips/relapse
- Externalize problem and encourage improved plan

Quit Day Session (cont.)

- Support

- Identify support level for client

- What do your family and friends say to you about quitting? How have they acted toward you (lately)?
 - How helpful has that been?
 - *If not helpful*, how do you deal with it?
 - Who's been supportive? How so?
 - Have you been getting the support you need? How so?
 - What's been most helpful from others while you've quit? What's been least helpful?

Quit Day Session (cont.)

■ Future Plan

- Prepare for any upcoming triggers
 - Is anything difficult coming up in the next few days that you want to plan for?
- Add new situations to plan
- Set date for next session

Follow-up Sessions (3 Day)

■ Self-efficacy & Attribution

- Assess confidence and determine attribution of success
 - How have you been able to stay quit?
 - How confident are you that you can go without smoking through all of next week?
- Add new situations to plan
- Set date for next session

Follow-up Sessions (1 Week)

- Motivation

- Assess motivation level

- How strong are your reasons to stay quit for the next few weeks? (To stay quit for longer?)

- Benefits/Costs

- Bolster motivation

- If you had to come up with a list of the pros and cons of quitting at this point, what would you say have been the benefits so far and what has been the downside?

Follow-up Sessions (2 Week)

■ Health

□ Boost motivation

- What changes have you noticed in your health since you quit? (Since I last asked about it?)

□ Share positive health facts as appropriate

■ Self-image

□ Encourage shift to nonsmoker self-image

- So, would you say you feel more like smoker (who's not smoking) or a nonsmoker? How so?
- How can you begin to feel more like a nonsmoker?

Follow-up Sessions (1 Month/Final)

- Top Three Triggers Over Time
 - Discuss the most common triggers that result in relapse after sustained abstinence
 - Alcohol
 - Smokers
 - Highly emotional situations
 - Educate about triggers without undermining confidence in client's ability to stay quit

Follow-up Sessions (1 Month/Final)

- Reflections on the Process
 - Reinforce clients motivation and self-efficacy
 - What helped you the most?
 - What do you like most about not smoking?
 - Is there anything that might make you go back to smoking?
 - What advice would you give to a friend who was quitting smoking?

Intervention Summary

- **Motivation** (identify a strong reason)
- **Confidence** (bolster belief in ability)
- **Skills** (develop a solid plan)
- **Self-image** (adopt a new view of self)
- **Perseverance** (keep trying)

Group Settings

Group Settings

- What is a group?
- Group design
- Applying cessation principles to a group setting
- Ideas for augmenting groups with telephone counseling
- Program promotion

What is a Group?

- An intervention which suggests that people benefit from shared experiences.
- Main principles:
 - Dealing with own issues may cause isolation
 - Counteract this by assembling people with similar issues - difficulties are not singular (to one person).
 - Knowing other people with similar issues can be comforting, especially for those who may not have access to people with the same concerns.

Group Design

- What is a good size for a group?
 - Roughly 8-12 members
- Group rules
 - Confidentiality – all to agree
 - Respect – no verbal or physical assaults
 - Participation – everyone participates
 - Order - one person speaks at a time
 - Other?

Applying Cessation Principles to a Group Setting

- Same elements – different implementation
 - Psycho-education
 - Group discussions
- How are groups best organized?
 - Open versus closed
 - Rolling admission vs. defined # of weeks
 - Capitalize on motivation
 - Different stages of readiness

Ideas for Augmenting Groups with Telephone Counseling

- Offer both services if possible and let clients choose one
- Provide one service first; if client relapses, recycle into the other
- Use telephone counseling for those who enroll in group but then don't show up

Ideas for Augmenting Groups with Telephone Counseling (cont'd)

- Use calls to support retention in groups, but sneak in some individualized counseling with every call
- Use telephone counseling as a supplement when a group member misses a meeting or reports a slip
- Use telephone counseling to bridge the dangerous first week of quitting

Special Topics

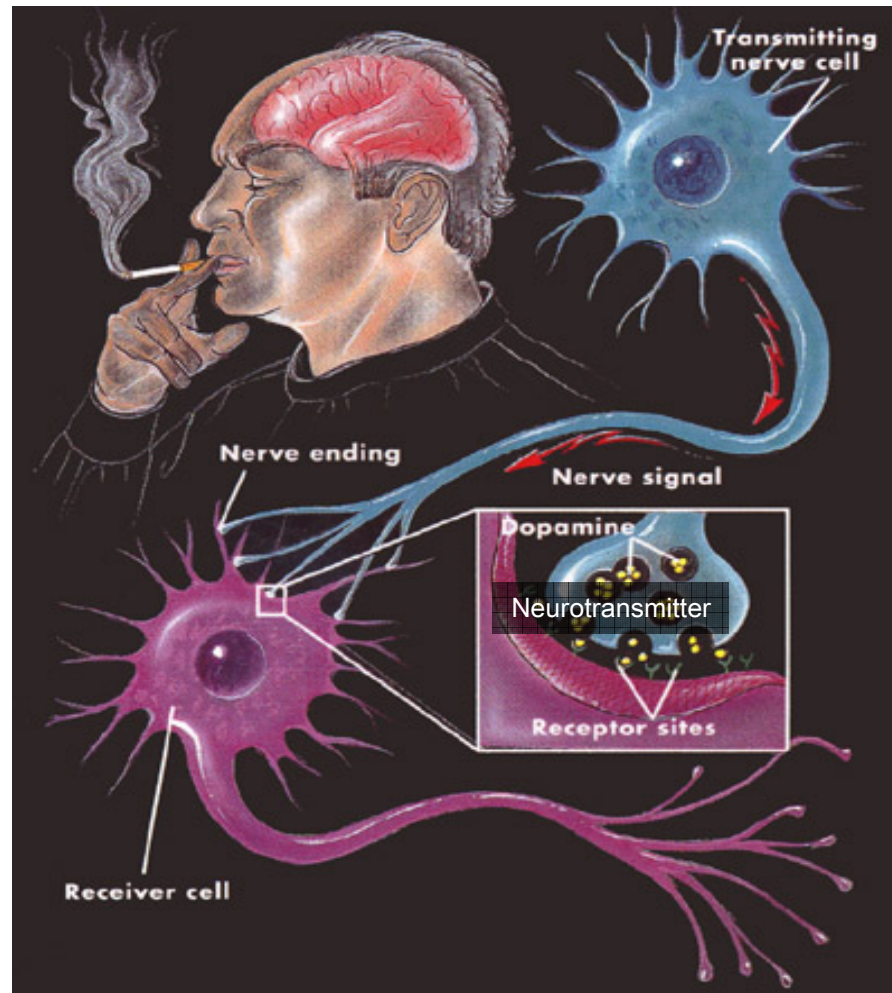
- Pharmacotherapy
- Teen smokers
- Pregnant smokers
- Smokers with mental illness and substance use disorders

Pharmacotherapy

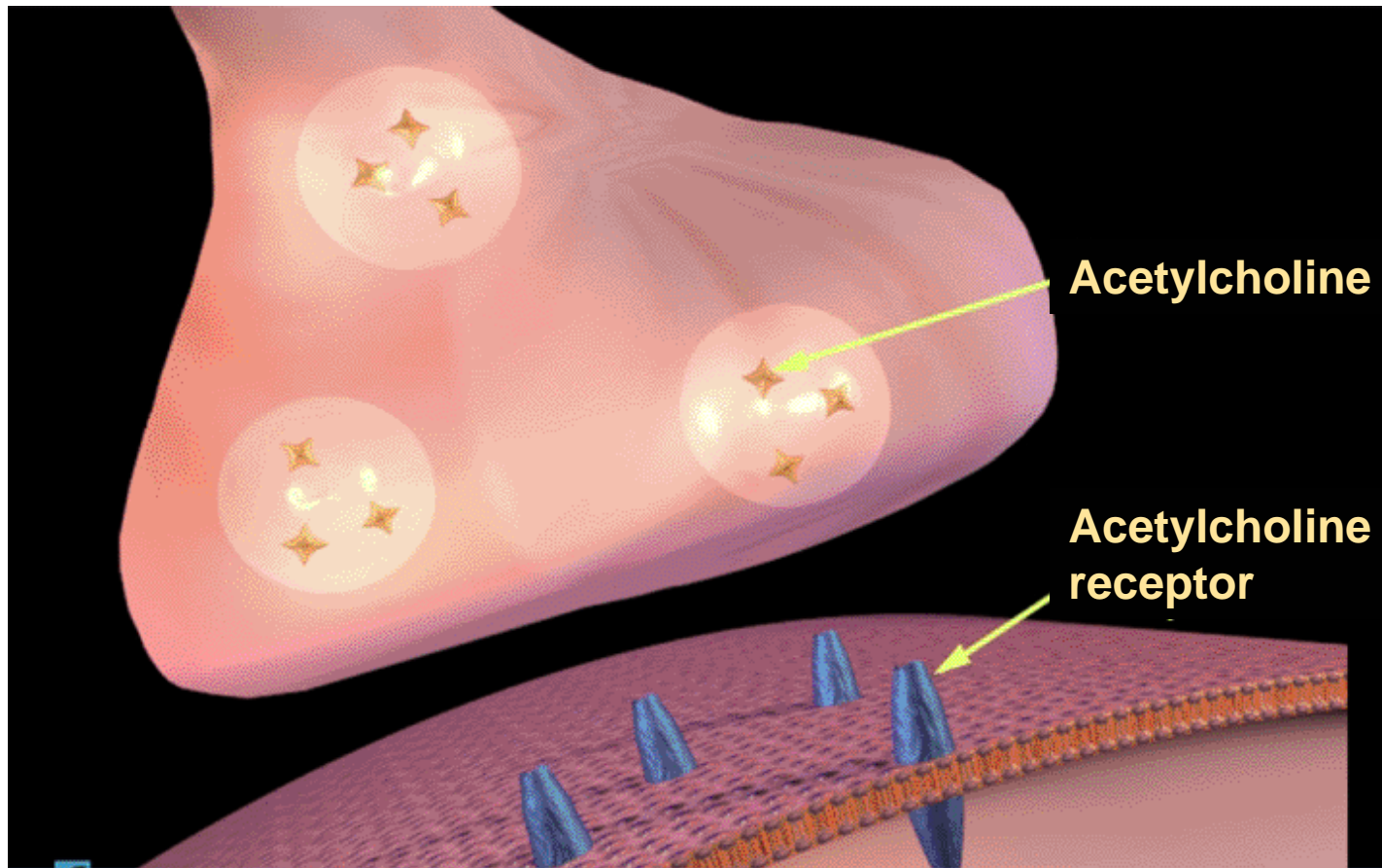
Role of Nicotine Receptors

- Acetylcholine nicotinic sub receptors are normal structures in the brain (and elsewhere) of smokers and never smokers.
 - 16 nicotinic subtypes identified
- Nicotinic receptors affect neurotransmitters (e.g. dopamine ($\alpha 4\beta 2$), norepinephrine, serotonin, opioid peptides, etc. in all people.
- When nicotine is present, it binds to receptors and disrupts normal activity.

Neurotransmission



Neurotransmission



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CESSATION

Role of Nicotine Receptors

- Chronic nicotine use results in permanent increase in the number of receptors.
- The brain gets used to a new, “nicotine normal” level.
- Reduced nicotine use (e.g. quitting smoking) disrupts “nicotine normal” receptor activity; causes nicotine withdrawal symptoms.
- Without nicotine, receptor activity normalizes again in 3-6 months, but increase in receptors remains indefinitely.
- Increase in receptors is responsible for:
 - Difficulty reducing amount smoked.
 - Quick relapse to former levels of smoking

Withdrawal Symptoms

- Depressed mood
- Sleep disturbance
- Irritability, frustration or anger
- Difficulty concentrating
- Anxiety
- Restlessness
- Decreased heart rate
- Increased appetite or weight gain
- Craving

Pharmacotherapy Options

- Nicotine Replacement Therapy (NRT)
 - Nicotine Patch
 - Nicotine Gum
 - Nicotine Lozenge
 - Nicotine Inhaler
 - Nicotine Spray
- Medication
 - Bupropion, Zyban, Wellbutrin S-R
 - Varenicline (Chantix)

Nicotine Replacement Therapy

- Used to help smokers get off nicotine slowly. Nicotine is released into the bloodstream (via the type of NRT) in order to help reduce physical withdrawal symptoms.
- NRT works by replacing some of the nicotine from smoking at the receptor sites with nicotine from less harmful sources.
- **Contraindications** include: pregnancy or nursing, recent heart attack, irregular heart beat, severe or worsening heart pain, stomach ulcers, overactive thyroid, high blood pressure, diabetes requiring insulin.
- Reduced efficacy for women at standard doses (metabolism).

Bupropion (Zyban/Wellbutrin S-R)

- Bupropion (Zyban) is a non-nicotine prescription drug, the sustained-release form of the antidepressant Wellbutrin.
 - The “pill” is thought to stimulate dopamine and norepinephrine, brain chemicals that give smokers the sensation of alertness & energy.
 - Reduces the withdrawal symptoms such as cravings, irritability and depressed mood.
 - Works equally well for men and women.

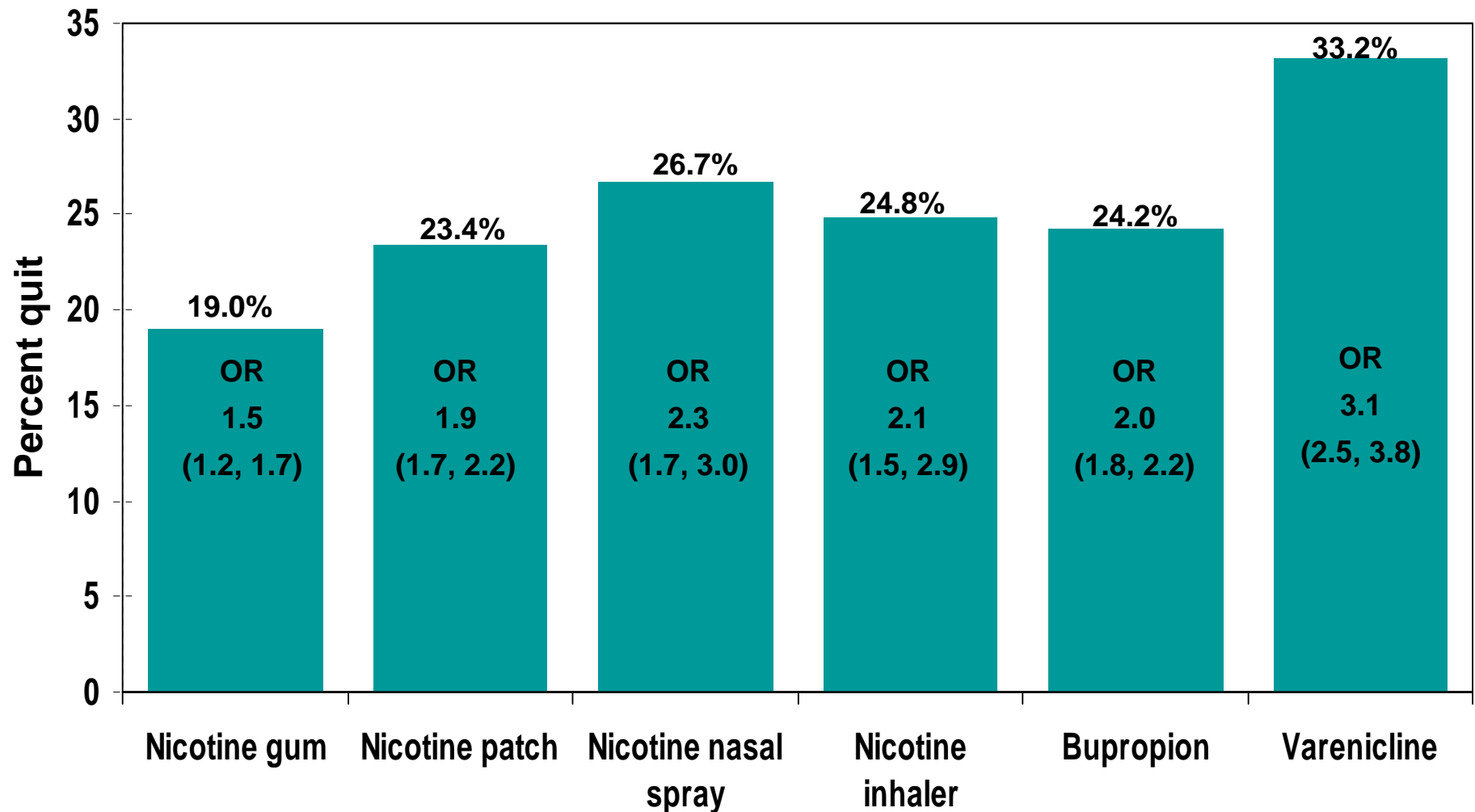
Varenicline (Chantix)

- Varenicline (Chantix) is a non-nicotine prescription drug developed specifically for smoking cessation. Not an antidepressant.
 - The “pill” releases Dopamine but substantially less than with smoking.
 - Varenicline specifically targets the alpha-4 beta-2 ($\alpha 4\beta 2$) nicotinic receptors, blocking the binding of nicotine from smoking.
 - Reduces the urge to smoke and reduces the pleasure derived from smoking.
 - Works equally well for men and women.

Varenicline (Chantix)

- Post-marketing reports of adverse mood and behavior changes.
- Available research data has been reviewed and causal links have not yet been established.
- New warnings are for both patients and providers to closely monitor psychiatric symptoms of anyone taking varenicline to stop smoking.
- Studies are underway to test varenicline in patients with MI.

Six Month Point Prevalence Quit Rates for FDA-Approved Cessation Medications



Nicotine lozenge: (single study results) 2 mg = OR 2.0 (1.4, 2.8) 4 mg = OR 2.8 (1.9, 4.0)

Source: *Treating Tobacco Use and Dependence: 2008 Update*. Public Health Service. May 2008

On the Horizon: Nicotine Vaccine

- In early development. Will take several more years.
- Works by stimulating immune system to produce antibodies to nicotine + protein molecule
- Antibodies then bind to any nicotine in bloodstream; can't pass the blood/brain barrier
- Effects of nicotine can't reach brain

Nicotine Patch



Cost: \$210-\$250 for 8-10 week program

Nicotine Patch

- Available over-the-counter
- Proper Use:
 - Stop smoking first.
 - Apply new patch daily to a different, clean, dry, hairless part of body (upper arm recommended).
 - Can wear 24 hours, depending on brand.

Patch Dosage & Schedule

Brand	Suggested Dosage	Suggested Plan
Nicoderm CQ[®] or generic (21 mg, 14mg, 7 mg)	Greater than 10 cigarettes per day, start with 21 mg	6 weeks on 21 mg 2 weeks on 14 mg 2 weeks on 7 mg
	Less than 10 cigarettes per day, start with 14 mg	6 weeks on 14 mg 2 weeks on 7 mg

Nicotine Patch (cont.)

- Potential problems:
 - Consult MD first if contraindications
 - Redness or itching
 - Vivid dreams or sleep problems
 - Avoid experimenting by cutting or using multiple patches
 - Use tape or bandages if patch slips off
 - Using the patch and smoking can increase heart rate or blood pressure

Nicotine Gum



Cost: \$55 for 108 pieces; \$33 for 48 piece refill

Nicotine Gum

- Available over the counter
- Dosage:
 - > 25 cigarettes per day start with 4 mg
 - < 25 cigarettes per day start with 2 mg

Nicotine Gum (cont.)

- Proper Use:

- Stop smoking first
- Chew until there is a peppery taste, then park between gum and cheek
- Repeat until gum loses its taste
- Chew on a schedule, not when craving

- Weeks 1-6: 1 piece every 1-2 hours
- Weeks 7-9: 1 piece every 2-4 hours
- Weeks 10-12: 1 piece every 4-8 hours

Nicotine Gum (cont.)

- Potential problems:
 - Consult MD first if contraindications
 - Taste may not be appealing
 - Gum may irritate mouth and stomach
 - Acidic foods and drinks can lower effectiveness
 - Must be self-administered
 - Use no more than 24 pieces per day
 - Using gum and smoking can increase heart rate or blood pressure

Nicotine Lozenge



Cost: \$40 for 72 lozenges

Nicotine Lozenge

- Available over the counter
- Dosage:
 - If first cigarette is smoked more than 30 minutes after waking, use 2 mg lozenge.
 - If first cigarette is smoked within 30 minutes after waking, use 4 mg lozenge.

Nicotine Lozenge (cont.)

■ Proper Use:

- ❑ Stop smoking first
 - ❑ Place lozenge in mouth and allow to dissolve slowly. Occasionally move from side to side until gone (20-30 minutes).
 - ❑ Use on a schedule, not when craving.

 - ❑ Weeks 1-6: 1 lozenge every 1-2 hours
 - ❑ Weeks 7-9: 1 lozenge every 2-4 hours
 - ❑ Weeks 10-12: 1 lozenge every 4-8 hours
-

Nicotine Lozenge (cont.)

- Potential problems:
 - Consult MD first if contraindications.
 - Can cause indigestion, sore throat, insomnia, nausea, hiccups, coughing, heartburn, headaches, flatulence.
 - Should not eat 15 minutes before or during lozenge use.
 - Must be self-administered.
 - Use no more than 20 lozenges per day.
 - Using lozenges and smoking can increase heart rate or blood pressure.
-

Nicotine Inhaler



Cost: \$50 for 42 cartridges

Nicotine Inhaler

- Available by prescription only
- Dosage:
 - Use one cartridge for every two cigarettes smoked
 - When used for 20 minutes, 2 mg of nicotine goes into body (roughly equivalent to 2 cigarettes)

Nicotine Inhaler (cont.)

■ Proper Use:

- ❑ Stop smoking first
- ❑ Place cartridge between two parts of holder and puncture both ends of cartridge
- ❑ Use on a schedule, not when craving
- ❑ Take shallow deep puffs
- ❑ Use each cartridge for 20 minutes total

Example plan (1 pack a day smoker)

- ❑ Weeks 1-4: 1 cartridge ever 1.5 hours
 - ❑ Weeks 5-8: 1 cartridge every 2 hours
 - ❑ Weeks 9-12: 1 cartridge every 4 hours
-

Nicotine Inhaler (cont.)

- Potential problems:
 - Consult MD first if contraindications
 - Can cause indigestion, throat irritation, and coughing
 - Puffing on the inhaler can be hard work
 - Must be self-administered
 - Use no more than 16 cartridges per day
 - Using the inhaler and smoking can increase heart rate or blood pressure

Nicotine Spray



Cost: \$60 for 10 ml. size

Nicotine Spray

- Available by prescription only
- Dosage:
 - One dose = 1 spray in each nostril delivers 1 mg of nicotine to nasal mucosa (.5 mg to each nostril)
 - One bottle contains about 100 doses (about one week's supply)

Nicotine Spray (cont.)

- Proper Use:

- Stop smoking first
- Prime pump for first use only
- Tilt head back slightly, insert tip of bottle as far as comfortable
- Spray once in each nostril **WITHOUT** sniffing.

- Weeks 1-8: 1-2 doses per hour
- Weeks 9-12: 1 spray in one nostril

Nicotine Spray (cont.)

- Potential problems:
 - Consult MD first if contraindications
 - Can cause nasal & throat irritation, watery eyes, sneezing, and coughing
 - Must be self-administered
 - Using the spray and smoking can increase heart rate or blood pressure
 - Could be highly addictive

Bupropion (Zyban/Wellbutrin S-R)



Cost: \$130 for a 30 day supply

Bupropion (Zyban/Wellbutrin S-R)

- Available by prescription only
- Dosage:
 - Start with 150 mg tablet once a day for 3 days
 - After that, take a 150 mg tablet in the morning and another one early in the evening

Bupropion (Zyban/Wellbutrin S-R)

■ Proper Use:

- Start the medication 10-14 days before quitting smoking
- Allow the medication to reach optimal blood levels

- A 7-12 week program is often prescribed

Bupropion (Zyban/Wellbutrin S-R)

- Potential problems:
 - Side effects might include: mild dry mouth, shakiness, skin rash, and, mild sleep problems
 - Risk for seizure exists (e.g., seizure disorder, withdrawing from alcohol, eating disorders)
 - Other drug interactions
 - Consult MD if pregnant or nursing
 - Caution while driving

Varenicline (Chantix)



Cost: \$100-150 for a 30 day supply

Varenicline (Chantix)

- Varenicline (Chantix) is a non-nicotine prescription drug developed specifically for smoking cessation.
- Is not an antidepressant
- It targets the nicotinic receptor alpha-4 beta-2 (neuronal acetylcholine).
- The “pill” releases Dopamine but substantially less than with smoking.
- Designed to reduce the urge to smoke and reduce the pleasure derived from smoking

Varenicline (Chantix)

■ Proper Use:

- ❑ White tablet (0.5 mg) once a day for days 1-3
- ❑ White tablet (0.5 mg) twice a day for days 4-7 (1 in the morning & 1 in the evening)
- ❑ Blue tablet (1 mg) twice a day from days 8 through the end of the 12 week treatment (1 in the morning & 1 in the evening)
- ❑ Take medication for 1 week prior to quitting
- ❑ Take after eating, with a full glass of water

Varenicline (Chantix)

- Potential problems:
 - ❑ Side effects might include: nausea, headache, insomnia, constipation, gas, vomiting, changes in dreams
 - ❑ Client should talk with doctor about FDA warning label
 - ❑ And if client: starts to feel upset or depressed, suicidal or homicidal, has kidney problems, is taking other medications (insulin, asthma medicine, blood thinner), is pregnant, breast feeding, or plans to become pregnant

Teen Smokers

Teen Smokers

- Theoretical Considerations
- Counseling Considerations

Theoretical Considerations

- Key theoretical component:
 - Teens seek out behaviors they associate with “adult” behavior.
 - Help teens view quitting, rather than smoking, as “adult” behavior.

Theoretical Considerations (cont.)

- Compared to adults teens are:
 - ❑ Dependent on family
 - ❑ Limited in life experience
 - ❑ Limited in maturity
 - ❑ Strongly influenced by peers
 - ❑ Fluid in identity

Counseling Considerations

- Who is the best suited to work with teen smokers?
 - Age is probably less important than skill and enthusiasm.
- How involved should parents be, if at all?
 - Teens are usually ok with parental consent, and it provides an opportunity to intervene.

Counseling Considerations

- What keeps teen smokers interested in talking?
 - A structured but flexible protocol allows for topics of interest to teens.
- How directive should counselors be?
 - We try to strike a balance between empowering teens and providing accountability.

Counseling Considerations

- How necessary is planning?
 - Planning is often a new idea; many teens start and stop without thinking much about it.
- How motivational are health issues?
 - Teens may already be experiencing health problems, or have seen them in others.

Counseling Considerations

- What role does identity development play?
 - How integral are cigarettes to the teen's identity?
 - Quitting smoking is an opportunity to reinforce the teen's "cutting edge" behavior.

Pregnant Smokers

Pregnant Smokers

- Theoretical & Counseling Considerations
 - Role of motivation
 - Role of cognition
 - Role of skill building

Pregnant Smokers

■ Role of Motivation

□ Teachable moment

- Pregnancy is a time of potential receptivity to change.

□ Misunderstanding health risks

- Accurate information can help boost motivation.

□ Loss of control

- Pregnancy imposes a timeline on quitting.

□ Ambivalence

- Having mixed feelings about quitting is normal, and is complicated by pregnancy.

Pregnant Smokers (cont.)

- Role of Cognition

- Self-efficacy

- Belief in one's own ability to quit is critical.

- Deprivation mentality

- Attending too much to others can create stress and feelings of resentment.

- Guilt

- Paradoxically, guilt can “allow” pregnant smokers to continue smoking.

Pregnant Smokers (cont.)

■ Role of Cognition (cont.)

□ Cognitive shift

- Some women never make the “shift in their thinking” to stay quit after giving birth.

□ Positive expectancy

- Relapse is more common with the belief that smoking will enhance well-being.

□ Self-image

- It’s important to make the mental change from smoker (who’s abstaining) to nonsmoker (smoking is no longer an option).

Pregnant Smokers (cont.)

■ Role of Skill Building

□ Mood management

- Fluctuations in hormones can cause instability during pregnancy and postpartum.

□ Social support

- Support is consistently an important predictor of success.

□ Assertiveness

- Being too passive or too aggressive can impede attempts to get personal needs met.

Pregnant Smokers (cont.)

■ Role of Skill Building (cont.)

□ Stress management

- Pregnant clients can benefit from relaxation training.

□ Planning

- The quitting plan may include unique triggers and coping strategies.

□ Pharmacotherapy

- Pregnancy is a contraindication for pharmacotherapy - discussion with MD is needed.

Smokers with Mental Illness & Substance Use Disorders

Psychiatric Health Issues

- Psychiatric comorbidity
 - Depressive disorder
 - Thought disorder (e.g., schizophrenia)
 - Bipolar disorder (manic-depression)
 - Anxiety disorder
 - Posttraumatic Stress Disorder (PTSD)
 - Other chemical abuse/dependency

Bringing Everyone Along Project

- Tobacco Cessation Leadership Network
 - www.tcln.org
- Developed to better serve tobacco users with mental health and substance use disorders.
- Resource Guide developed for health professionals providing tobacco cessation services.
 - based on existing evidence base, survey and interview data from national experts, advice from Expert Advisory Committee
- Dissemination through website, conference calls, workshops, networks.



Prevalence

- 20% of Americans have mental illness/substance use disorders at any point in time
- Nicotine dependent at rates 2-3 times higher than the general population
- Consume 44.3% of all cigarettes smoked in the U.S.



Statistics

- Persons with mental illness die young
 - 20% shorter life span (live 25 years less)
- Greater elevated risk
 - Cardiovascular disease
 - Respiratory disease
 - Lung cancer
 - Infections
 - Diabetes
- Smoking may be the most modifiable risk factor for decreasing excess mortality and morbidity



Tobacco Use by Diagnosis

- Schizophrenia – 65-85%
- Bipolar disorder – 55-70%
- Major depression – 50-60%
- Anxiety disorders – 45-60%
- Drug abuse/dependence – 65-85%
- Alcohol abuse/dependence – 55-65%

During a recent CSH study.....

- 25% smokers met the criteria for Major Depressive Disorder (MDD) using the PHQ-9.
- 70% of callers have at least mild depressive symptoms.
- 31% are currently in therapy and/or taking medication for depression
- 42% have been diagnosed by a health care provider as depressed in the past year



Why is This Population Vulnerable?



Source: Bringing Everyone Along Project (2008)

Unique Challenges

- Biological predisposition
- Psychological and social factors
 - Barriers to treatment
 - Systems & providers
 - Clients



Biological Predisposition

- Persons with mental illnesses have unique neurobiological features that:
 - may increase their tendency to use nicotine,
 - make it more difficult to quit, and
 - complicate the withdrawal phase.
- Nicotine enhances
 - concentration
 - information processing
 - learning
 - mood
- May reduce medication side effects



Barriers to Treatment:

System and Provider Factors

- Tobacco as socialization activity, behavioral reward
- Staff acceptance, promotion
- Fear of symptom exacerbation
- Expectation of failure
- Lack of training



Barriers to Treatment:

Patient/Client Factors

- Expectation of failure
- Fear of withdrawal symptoms
- Lack of coping skills
- Substance abuse (other than tobacco)



Interventions: What is the Evidence?



Source: Bringing Everyone Along Project (2008)

Myth #1

Myth: Persons with mental illness and substance use disorders enjoy smoking and don't want to quit.

Fact: Persons with mental illness and substance use disorders want to quit smoking and want information on cessation services and resources.

- ❑ Study of 300 depressed smokers: 79% were interested in quitting. (Prochaska et.al., 2004)
- ❑ Review of clinical trials: 50% - 77% in substance use facilities were interested in quitting. (Joseph et.al., 2004)



Myth #2

Myth: Persons with mental illness and substance use disorders are more addicted to nicotine and therefore are unable to quit smoking.

Fact: Persons with mental illness and substance use disorders can successfully quit using tobacco.



Cessation Rates

Although quit rates for persons with mental illnesses are less than the general populations, smoking cessation rates are still substantial.

Major depression- up to 38% (Lasser et al., 2000)

Schizophrenia- between 10-30% (Addington et. al., 1998; Baker et al., 2006)



Treatment: MI/SUD Fundamentals

- Demonstrated interest in quitting across populations
- Smoking cessation rarely jeopardizes stability of primary disorder or recovery
- Similar treatment/relapse prevention techniques



Intake Assessment Recommendations

- Past/current history of MI treatment and SUD recovery
- Current health history including medications
- Current life situation
- Social support
- Tobacco use history
 - Determine current interest in quitting
 - If interested; determine readiness to quit



Determining Readiness to Proceed

- Motivation
 - “Interested” is sufficient
 - Don’t rule out initiating some type of intervention if not motivated to quit now
- Stability
 - Need to be psychiatrically stable-do not need to be in full remission
 - No major medication changes
 - No major life changes
 - No active intoxication/withdrawal; client in recovery process



Unique Tobacco Treatment Needs

- Determine need for involvement from primary care/other health care providers
- Determine need for more intensive behavioral therapy
- Address psychotropic medication issues
- Tailor treatment plan based on
 - Current stability of symptoms/recovery
 - Functional status
 - Current psychotropic medications
 - Previous quit history



Pharmacotherapy Guidance for MI/SUD

- MI/SUD smokers trying to quit should receive pharmacotherapy (PHS Clinical Practice Guideline, 2008)
- Dose level and duration of drug treatment individualized.
- Many will need
 - Higher doses
 - Combination treatments
 - Longer duration of treatment

Pharmacotherapy Guidance

■ Bupropion (BUP)

- ❑ Effective in smokers with Major Depression but relapse high when treatment discontinued
- ❑ BUP not appropriate as only medication in Anxiety disorders
- ❑ Effective in smokers with PTSD (limited evidence)
- ❑ Effective in smokers with Schizophrenia but relapse high when treatment discontinued
- ❑ Limited published data on effectiveness in SUD



Pharmacotherapy Guidance

- Bupropion (BUP)

- Contraindicated in seizure and eating disorders
- Not recommended
 - Alcohol abuse/dependence
 - Bipolar disorder
 - Extended sleep deprivation
 - Past head trauma
- Interferes with efficacy of protease inhibitors used for HIV/AIDS treatment



Pharmacotherapy Guidance

- Varenicline (Chantix)
 - Anecdotal reports of effectiveness for MI/SUD
 - One study in UK; positive results
 - Gap in the varenicline evidence base
 - Post marketing adverse behavior and mood changes
 - Have been reported in all samples
 - Causal links have not yet been established
 - Providers need to closely monitor mental status of anyone quitting smoking on varenicline



Pharmacotherapy Guidance

- Smoking induces CYP1A2 isoenzyme
- Approximately doubles clearance of
 - **Antipsychotics:**
Prolixin (fluphenazine), Haldol (haloperidol), Zyprexa (olanzapine), Clozaril (clozapine), Thorazine (chlorpromazine)
 - **Antidepressants:**
Elavil (amitriptyline), Aventyl (nortriptyline), Jaminine (imipramine), Anafranil (clomipramine), Sinequan (doxepin), Prozac (fluvoxamine)
- Cessation may produce rapid, significant increase in blood levels
- Need to monitor for increased side effects



Clinical Monitoring Recommendations

1. Patients should be seen 1 to 3 days after initiating smoking cessation
2. Monitor weekly for the 1st four weeks for MI/SUD relapse and the need to adjust medication levels
3. After 1st month, monthly review is suggested for 6 months
4. Communication between the primary care provider and mental health provider should occur
 1. During the initiation of the cessation attempt
 2. During the cessation period if any psychiatric complications occur

^[1] Strasser, K., Moeller-Saxone, K., Hocking, B., Stanton, J., & Kee, P (2002). Smoking cessation in schizophrenia. General practice guidelines. Australian Family Physician, 31, 21-24. ^[2] Provincial Health Services.(2006). Tobacco reduction in the context of mental illness and addictions: A review of the evidence. Centre for Addiction Research of British Columbia



Concluding Thoughts

Concluding Thoughts

- Use a collaborative approach to cessation
- Employ sound cognitive & behavioral principles
- Explore pharmacotherapy combined with counseling
- Consider clients' special needs and tailor interventions
- Encourage quit attempts
- Follow-up proactively when possible

Any Other Questions or Comments?

Thank you!!

