

Special Populations: Guidelines for Pregnant Smokers

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"Best Practice"



- Brief cessation counseling – 5-15 minutes – by a trained health care provider, combined with pregnancy-specific self-help materials
- 5 A's model
- Vs. "usual care"
 - Counseling lasting <3 minutes
 - Recommendation to stop smoking, sometimes with self-help material or a referral to a smoking cessation program

Pregnancy – a Catalyst for Change & Important Differences

- Concerns about the developing fetus motivate lifestyle modifications
 - Opportunity – “I always intended to quit anyway”
 - VS.
 - Imposition – “I had no intention of quitting smoking”

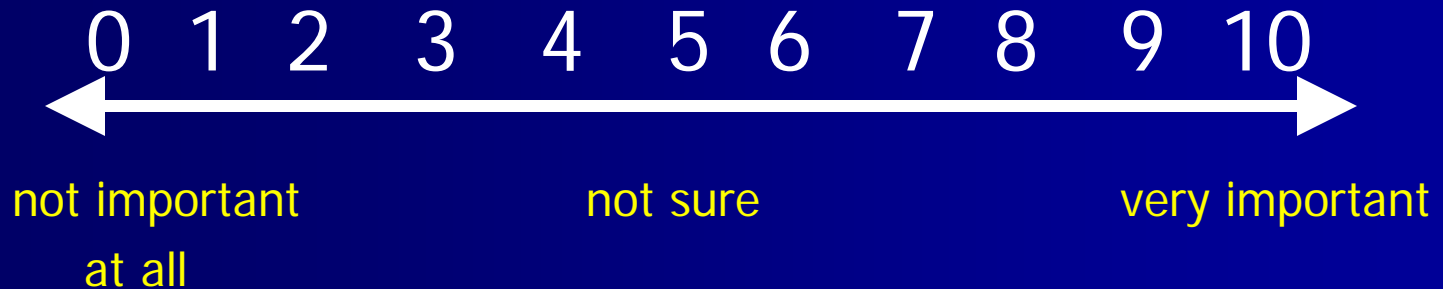
Unique Profiles = Unique Treatment Focus



- Suspended quitters
- Those who intend to quit for good
- Spontaneous quitters
- Those who quit in response to a planned intervention
- Those who cut down

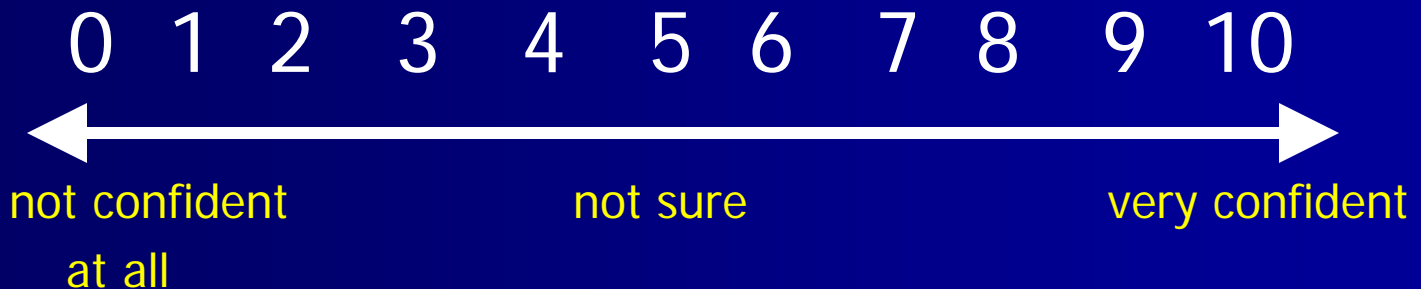
How important is it?

- On a scale from 0-10, how important is it to quit smoking?



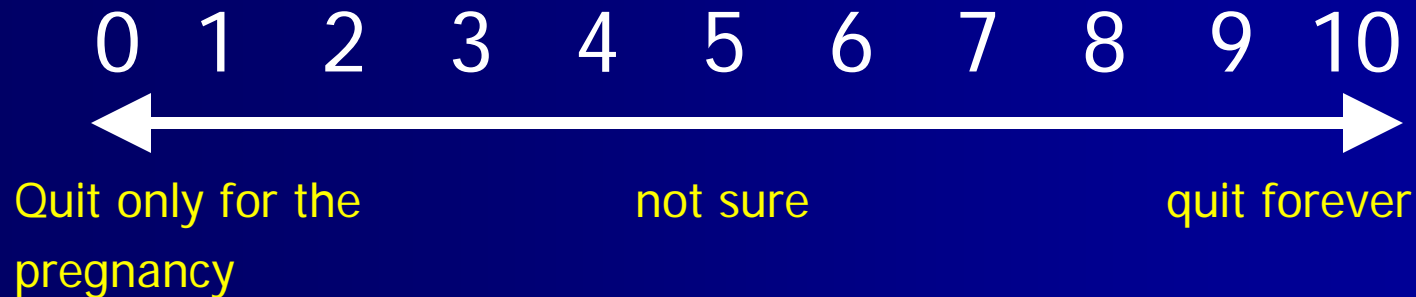
How confident are you?

- On a scale from 0-10, if you were to try to quit smoking, how confident do you feel that you'd be able to do it?



A New Scaling Question

- The intention to quit for good falls on a continuum for pregnant women:



(Quinn et al., Mat.&Child Health 2006)

Multiple Choice

- A. I have never smoked or have smoked less than 100 cigarettes in my lifetime.
- B. I stopped smoking before I found out I was pregnant, and I am not smoking now.
- C. I stopped smoking after I found out I was pregnant, and I am not smoking now.
- D. I smoke some now, but I have cut down on the number of cigarettes I smoke since I found out I was pregnant.
- E. I smoke regularly now, about the same as before I found out I was pregnant.

Widely Varied Statistics

- Different definitions of "quitting"
- Accurate disclosure of smoking status
- Varying efficacy of different interventions

Quinn et al. Mat..& Child Health May 2006
Russel et al. Nic & Tob Rsch April 2004



Epidemiology

- 25 – 60% of pregnant smokers quit “spontaneously” when they learn they are pregnant
- Up to 17% of those still smoking at intake may quit sometime before delivery

Epidemiology

- 65-80% of women who were abstinent during pregnancy start smoking again before the baby is one year old
 - 45% at 2-3 months postpartum
 - 60-70% at 6 months
 - As much as 80% at one year

Epidemiology

- 15 – 30% of women who quit smoking when they find out they are pregnant relapse prior to delivery
- Est. 20 % of all pregnant women tobacco users smoke throughout their pregnancies



Suspended Quitters

Intention to quit only for the length of the pregnancy

- A time limited “restriction” of smoking vs. an “intentional” behavior change
- Focus on quitting to protect the health of the baby
- Little development of meaningful coping skills that other quitters may acquire

Spontaneous Quitters

- Women who smoked prior to conception, but quit on their own shortly after becoming pregnant and before entering prenatal care
- Remarkably successful: with little or no formal intervention, 65-81% confirmed abstinent at the end of pregnancy - up to 6 months after quitting
 - Compare to 45% abstinent at 6 months in a highly motivated, symptomatic population of post-myocardial infarction patients

(Solomon & Quinn Nic&Tob Rsch 2004)

Relapse Prevention Challenges:

- Quitting smoking may seem “easy” during pregnancy
 - Often report less withdrawal and less intense urges and cravings
 - May not be exposed to common triggers such alcohol and caffeine (change in lifestyle)
 - Strong social messages not to smoke, especially for those visibly pregnant
 - Strong motivation to have a healthy infant
 - Nausea
 - Strong confidence
- A more spontaneous decision
- False confidence due to the excitement of pregnancy

Common Causes of Relapse in the post-partum period

- Never really having quit
- Nostalgia for former self
- Nostalgia for a happier, less stressful time
- “controlling” one’s smoking
- Weight concerns
- Return of triggers (alcohol, caffeine)
- Smoking spouse
- Underdeveloped coping strategies and overconfidence
- Less social pressure to stay quit
- Sleep deprivation
- Financial worries
- Inability of a pregnant woman to predict what her life will be like after the birth of her child
- Increased stress (relationship troubles, medical problems, stressful events)

Helpful Messages

(Quinn et al. Mat&Child Health 2006)



- Information on behavioral and mental coping skills
- Exercises regarding triggers to smoke
- Messages preparing them for withdrawal
- Reminders of why they quit
- Emphasizing the negative health effects for both mom and baby, including effects of ETS exposure

Helpful Messages

(Quinn et al. Mat&Child Health 2006)

- Information on weight gain
- Ways they can spend the money they save by not buying cigarettes
- The importance of establishing a non-smoking support system
- Information that focuses on the “new role” as a mother and its responsibilities



Strategies

(Bane et al. Addict Behav 1999)

■ Pregnancy-specific decisional balance

<u>Pros</u> Relaxation Pleasure	<u>Cons</u> Costs, health hazards Social disapproval
<u>Concerns</u> Withdrawal Emotional distress Loss of coping mechanism	<u>Benefits</u> Healthy baby Save money Pride in being a "good mother"

Successful Interventions

- Include the smoking habits of partners, others living in the home, and close friends
- Support the women with positive encouragement rather than negative nagging
- Encourage a woman's social networks to support her
- Take place throughout pregnancy through early childhood care

Successful Interventions

Distinguish between those who have realistic views of the difficulties that await them and are developing necessary coping skills

VS.

Those who have not envisioned the challenges that lie ahead in their efforts to stay quit

Successful Interventions

*** Discuss the risks of relapse immediately after childbirth**

- Increase the patient's awareness of the potential for relapse
- Reaffirm her commitment to abstinence
- Begin to change the motivation for quitting from extrinsic sources to intrinsic sources

American College of Obstetrics & Gynecology *[www.acog.org]*

- If patient is unable to quit using tobacco by psychosocial means, consider pharmacotherapy
- Weigh risks of medication against risk of continued tobacco use
 - Risks of nicotine in the human fetus have not been shown
 - Benefits of NRT in cessation for pregnancy have not been shown

NRT as an alternative to smoking

- Carbon Monoxide: a known reproductive toxin
 - Fetal Hypoxia
 - Retards Fetal Growth
 - Reduces Fetal Brain Weight
- Oxidant gases, Lead, Cadmium



Pharmacotherapy in Pregnancy Risk/Benefit Analysis, Benowitz, Dempsey (2004)

- "Our review indicates that the risk of cigarette smoking during pregnancy is far greater than the risk of exposure to pure nicotine. The use of replacement therapy is probably not without risk, although the magnitude of risk to the mother and fetus is unknown... in the meantime, if a woman is unable to quit smoking despite behavioral therapy (and is, therefore, highly addicted), nicotine therapy should be considered."

Benowitz and Dempsey (2004), continued

- "...nicotine does not appear to be a teratogen in the strict sense of the word (i.e., producing anatomical defects)...the choice between NRT and bupropion should be based mainly on the mother's preference and on contraindications regarding bupropion."

Pharmacotherapy in Pregnancy

- For women who are not able to quit successfully with behavioral treatment alone...
 - Short acting oral NRT ad lib
 - Nicotine patch in lowest effective dose if oral NRT is ineffective
 - Combination NRT if needed
 - Bupropion alone or added to NRT if needed
- No data on varenicline safety

Pharmacotherapy

Nicotine Replacement Therapy

- Introduce as early as possible in pregnancy
- Lowest dose that controls withdrawal symptoms and permits abstinence, and then can increase dose if necessary
- Use products that allow intermittent dosing
 - gum, lozenge or inhaler
 - or take patch off at night

Pharmacotherapy in Lactation

Benowitz and Dempsey, (2004)

- “It is unlikely that the low level of exposure {with NRT} is hazardous to the infant. In contrast, good evidence indicates that exposure to environmental tobacco smoke by the respiratory route is hazardous to the infant...On balance the benefits of breast feeding and smoking abstinence during the postpartum period greatly outweigh the risks of {NRT} in the post-partum period.”

Lactation and Post-partum: Recommendations

- Use lowest effective dose of NRT
- Use intermittent dosing product if possible
- Breast feeding should be delayed as long as possible after use of NRT, OR
- “Pump and Dump” after NRT use
- Bupropion is NOT recommended
- Varenicline is NOT recommended

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