SMOKING CESSATION IN PREGNANCY

Department of Health and Mental Hygiene
Center for Health Promotion, Education and Tobacco Use Prevention
http://www.fha.state.md.us/ohpetup/
ORDER OF PRESENTATION

- Background: Women/Pregnant Women Smokers in US and MD Data
- Factors influencing smoking cessation
- Health Effects: Maternal, Fetal, Infant/Child
- Intervention: Smoking Cessation in Pregnancy (SCIP)
- 5 A’s Counseling Intervention
- Transtheoretical Model of Change
- Motivational Interviewing
- Review
US Facts: Women and Smoking
(Surgeon General’s Report on Women and Smoking, 2001)

• Tobacco Use is the Leading cause of preventable death in the US.

• 18.1% of women 18+ years smoke
  (Tobacco Use Among Adults, MMWR, 2005)

• 9% of female Middle School students smoke (Cigarette Use Among High School Students, MMWR, 2006)

• 23% of female High School students smoke (or more than one in five) (CDC, 2005)

• Cigarette smoking kills an estimated 178,000 women in the United States every year (National Women’s Health Information Center, 2005)
Maryland Facts: Women and Smoking

- 11.8% of Maryland women smoke \((\text{CDC, BRFSS, 2006})\)

- 3.2% of middle school girls smoke \((2006 \text{ Maryland Youth Tobacco Survey})\)

- 13.7% of high school girls smoke \((2006 \text{ Maryland Youth Tobacco Survey})\)
US Facts: Smoking Prevalence of Women by Race/Ethnicity
(National Health Interview Survey, MMWR, 2004)

- 28.5% American Indian/Alaskan Native
- 20.4% white
- 17.2% African American
- 10.9% Hispanic
- 4.8% Asian
MD Adult Cigarette Use by Race/Ethnicity

(CDC, Behavioral Risk Factor Surveillance System 2007)
US Facts: Tobacco Use During Pregnancy

• 10.7% of women use tobacco during pregnancy, which is down 42% from 1990. *(CDC, 2003)*

• Only about 30% of women quit smoking when they find out they are pregnant. *(National Vital Statistic Reports, 2003)*
US Facts: Tobacco Use During Pregnancy

• Smoking in pregnancy accounts for an estimated 20-30% of low birth weight babies, up to 14% of preterm deliveries, and some 10% of all infant deaths. *(US Public Health Service, 2004)*

• If ALL pregnant women in the US stopped smoking, there would be an estimated 11% reduction in stillbirths and a 5% reduction in newborn deaths. *(The Health Consequences of Smoking: A Report of the Surgeon General – 2004)*
Smoking During Pregnancy
Maryland 2000-2006
(MD Birth Certificate Data, Vital Statistics Administration)

<table>
<thead>
<tr>
<th>Year</th>
<th>Smoking Rate</th>
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<tbody>
<tr>
<td>2000</td>
<td>9.2%</td>
</tr>
<tr>
<td>2001</td>
<td>8.7%</td>
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<tr>
<td>2002</td>
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<tr>
<td>2003</td>
<td>7.7%</td>
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<tr>
<td>2004</td>
<td>7.4%</td>
</tr>
<tr>
<td>2005</td>
<td>6.9%</td>
</tr>
<tr>
<td>2006</td>
<td>6.8%</td>
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</table>
Smoking During Pregnancy
Maryland by Race 2000-2006
(MD Birth Certificate Data, Vital Statistics Administration)
Smoking During Pregnancy
Maryland by Region 2000-2006

(MD Birth Certificate Data, Vital Statistics Administration)
Pregnant Women Smoking Status by County 2000 and 2005

(MD Birth Certificate Data, Vital Statistics Administration)
Profile: The Pregnant Smoker


- White
- Unmarried
- 25.5% have less than a high school education
- 3.8% are heavy smokers
- 67% resume smoking in the first year after delivery
- 60% rely on local health departments and/or Medicaid as a source of care/payment

(Smoke-free Families Nat’l Program Office)
Factors Influencing Smoking Among Women


- More addicted to cigarettes
- Less ready to stop smoking
- Dependence on smoking for weight control
- Response to stress
- Less confident in resisting temptation to smoke
- Tobacco Marketing
Maternal Health Effects

During Pregnancy
• Miscarriage
• Premature birth
• Ectopic pregnancy
• Placental abnormalities
• Bleeding
• Premature rupture of membranes

Postpartum
• Impaired lactation
• Inhibited protection against SIDS from breast milk
Long-term Maternal Effects

- Decreased life expectancy
- Heart Disease
- Cancer
- Embolism & Stroke
- Emphysema
- Decreased fertility
- Earlier menopause

- Menstrual abnormalities
- Increased risk of osteoporosis
- Premature aging of the skin
- Muscular degeneration
Health Effects on Fetus

(DHHS, 1990; ACOG, 1997; Smoke-Free Families National Program Office and ACHS, 1996)

• Fetal Growth Retardation
• Small for gestational age
• Increased fetal heart rate
• Chronic Fetal Hypoxia
• Preterm delivery
• Low Birth Weight
• Fetal artery constriction
• Lessened amounts of oxygen and nutrients in the fetus
• Perinatal death
Health Effects On Children (Environmental Tobacco Smoke)

(The Health Consequences of Involuntary Exposure to Tobacco Smoke, Surgeon General’s Report, 2006)

- Sudden Infant Death Syndrome (SIDS)
- Respiratory tract infections
- Colds
- Ear infections
- Reduced lung function
- Diabetes
- Childhood obesity
- Asthma
- Pneumonia and Bronchitis
- Childhood and adult cancers
- ADHD
- Increased likelihood of becoming smokers
- Infantile colic
Healthy Maryland 2010

- Infant Mortality Rate (IMR)
  - reduce the IMR to no more than 6.0 per 1,000 live births (IMR was 7.9 per 1,000 in 2006)

- Low Birth Weight (LBW)
  - reduce LBW to no more than 8.0% (LBW was 9.4% in 2006)
Why is Pregnancy an *ideal* time to quit smoking? *(Sprauve, 1999)*

- Dual (2 for 1) benefit
- Initial enthusiasm is high to quit
- Increased contact with health care providers
- Dose-response relationship
- Quit rates *increase 10%-20%*
- Low birth weight *decreases by 25%*
- Infant mortality rate *decreases by 10%*
SMOKING CESSATION IN PREGNANCY (SCIP)
SCIP History

When: 1988 by a federal grant

What: A smoking cessation intervention for pregnant smokers

How: Training of local health department staff and managed care organizations to facilitate quitting or reducing cigarette consumption among pregnant women.
SCIP OBJECTIVES

- Motivate and Assist pregnant women in quitting smoking
  - Move women along stages of change continuum
  - Increase number of quit attempts
- Inform pregnant smokers about smoking-related risks
- Assist in maintaining a smoke-free lifestyle
Elements of SCIP

**Element #1**

- Patient Self-help Materials
  - *Quit & Be Free* Client Manual
  - Quit Kit
Quit Kit Items

- Baby Shirt
- Relaxation CD
- Rubber bands and Paper Clips
- Mints
- Toothpaste and Toothbrush
- Content Card
- Emory Boards
Element #2

Brief Counseling Intervention
– 5 A’s for Brief Smoking Cessation Counseling for Pregnant Women
(U.S. Department of Health and Human Services)

• Ask
• Assess
• Advise
• Assist
• Arrange
5 A’s

ASK

ADVISE

ASSESS

ASSIST

ARRANGE
#1  **ASK**

*client about tobacco use...*

- Identify and document smoking status and smoking exposure for every client at each visit
#2 ADVISE client of...

- Health hazards of smoking and smoke exposure
- Benefits of quitting
- Need for change – given in a non-authoritarian and supportive style
#3 ASSESS

*client’s readiness to quit stage…*

- Asking open-ended questions
- Eliciting self-motivational statements
- Listening Reflectively (listening with empathy)
- Affirming the client
- Summarizing
#4 **ASSIST**

*client in making a quit attempt...*

- Positively reinforce past attempts to quit
- Help client to identify barriers and solutions
- Communicate free choice
- Give support and confidence in patient’s ability to quit
- Elicit other sources of support (i.e., family, friends)
- Consequences of action/inaction
- Discuss a plan (elicited from client)
- Ask for commitment
- Offer client Quit and Be Free manual & Quit Kit
#5 **ARRANGE**

*follow-up with client…*

- Schedule next counseling session
  - Work with client on what is achievable between now and next appointment
  - Summarize what actions client has agreed to do before next appointment
- Follow-up phone call in two weeks
5 A’s

**ASK**
Smoking status

**ADVISE**
• Health effects
• Need for change

**ASSESS**
Readiness to quit

**ASSIST**
In quitting

**ARRANGE**
• Follow-up
• Documentation
• Phone call (2 wks.)
Stages of Change
(Prochaska and DiClemente, 1983)

- **Pre-contemplation** - not interested in quitting
- **Contemplation** - more open to the possibility of quitting and how to do it
- **Preparation** - taking small steps in learning more about quitting, cutting down, and setting a quit date
- **Action** - quitting the habit, seeking social support, coping mechanisms
- **Maintenance** - smoke-free
- **Relapse** - return to smoking
Stages of Change & Opportunities for Health Professionals

• **Pre-contemplation**
  – Use relationship building skills
  – Personalize risk factors
  – Use teachable moments
  – Educate in small bits, repeatedly, over time

• **Contemplation**
  – Elicit reasons to change/consequences of not changing
  – Explore ambivalence; praise client for considering the difficulties of change
  – Question possible solutions for one barrier at a time
  – Pose advice gently as “a solution”

(Zimmerman, Olsen, Bosworth, 2000)
Stages of Change & Opportunities for Health Professionals (cont.)

- **Preparation**
  - Encourage client efforts
  - Ask which strategies the client has decided on for risk situations
  - Ask for a quit date

- **Action**
  - Reinforce the decision
  - Delight in even small successes
  - View problems as helpful information
  - Ask what else is needed for success
Stages of Change and Opportunities for Health Professionals (cont.)

• **Maintenance**
  – Continue reinforcement
  – Ask what strategies have been helpful and what situations problematic
Stages of Change and Opportunities for Health Professionals (cont.)

- **Relapse**
  - Ask what situations were problematic
  - Identify what strategies were helpful
  - Re-assess the client’s readiness for quitting again.
STAGES OF CHANGE

(adapted from DiClemente and Prochaska)

Stage I
Pre-contemplation

Stage II
Contemplation

Stage III
Preparation

Stage IV
Action

Stage V
Maintenance

Relapse

Client enters
Patient not interested in changing

Client enters
Patient will examine benefits & barriers to change

Client enters
Client will discover elements necessary for decisive action

Client enters
Client will incorporate change into daily lifestyle

Client enters
Patient will take decisive action

Client exits at any stage

Client exits at any stage

Relapse

Client re-enters at any stage

Client re-enters at any stage
Stages of Change

Precontemplation
Contemplation
Preparation
Action
Maintenance
Relapse

5 A’s

ASK
Smoking status

ADVISE
• Health effects
• Need for change

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Readiness to quit

ASSIST
In quitting

ARRANGE
Follow-up
• Documentation
• Phone call (2 wks.)
Motivational Interviewing (M.I.)

(Rollnick, S., & Miller, W.R. 1995)

“Motivational Interviewing is a directive, client-centered counseling style for eliciting behavior change by helping clients to explore and resolve ambivalence.”
Five Principles of M.I.

1. Express Empathy
2. Develop Discrepancy
3. Avoid Argumentation
4. Roll with Resistance
5. Support Self-Efficacy
1. Express Empathy

- Create a warm, supportive, patient-centered atmosphere
- Empathic, reflective listening is essential

Remember that *Acceptance* facilitates change, *Pressure* to change blocks it
2. Develop Discrepancy

• Create discrepancy in the patient

(\textit{where the patient wants to be} \ vs. \ \textit{where they are right now})

• Patient should present arguments for change
3. Avoid Argumentation

• Keep patient resistance levels LOW
  More resistance = Less likely to change

“Denial is not a problem of patient personality, but of therapist skill”
4. Roll with Resistance

- Opposing resistance generally reinforces it
- DON’T PUSH!!

- “Roll with” the momentum with a goal of shifting client perceptions (Motivational Enhancement Therapy Manual, Vol. 2, 1999)
5. Support Self-Efficacy

• Impart belief about possibility of change

• Remember it is *always* the patient’s choice whether or not to change
5 A’s

ASK
Smoking status

ADVISE
• Health effects
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ASSESS
Readiness to quit

ASSIST
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Stages of Change

Precontemplation
Contemplation
Preparation
Action
Maintenance
Relapse

Motivational Interviewing

Express Empathy
Develop Discrepancy
Avoid Argumentation
Roll with Resistance
Support Self-efficacy
## Element #3

### Documentation & Follow-up

| Date of 1st Visit:  
__/___/___  
Trimester:  
1  
2  
3  
PP | # Cigs. in last 24 hrs:_______ | Interest in Quitting:  
Not interested  
Interested, but not ready  
Taken Steps to quit  
Ready to quit  
Smoke-free | Topics discussed?  
Benefits  
Support  
Strategies | Client agrees to:  
Think about quitting  
Cut down # of cigs.  
Set a quit date:_______  
Prepare to quit  
Quit  
Stay smoke-free | Problems/Barriers:  
| Goal for next visit:  
| Initials:______ |
|---|---|---|---|---|
| Date of Visit:  
__/___/___  
Trimester:  
1  
2  
3  
PP | Did Client Quit?  
Yes  
_No | Interest in Quitting:  
Not interested  
Interested, but not ready to quit  
Ready to quit | Topics discussed?  
Benefits  
Support  
Strategies | Client agrees to:  
Think about quitting  
Cut down # of cigs.  
Set a quit date:_______  
Prepare to quit  
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Prepare to quit  
Quit  
Stay smoke-free | Problems/Barriers:  
| Goal for next visit:  
| Initials:______ |
|---|---|---|---|---|

### Date of Follow-up call:  
__/__/____  
Comments:  
| Date of Follow-up call:  
__/__/____  
Comments:  
| Date of Follow-up call:  
__/__/____  
Comments:  

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Review

1. Self Help Materials
   - Quit & Be Free Client Booklet
   - Quit Kit

2. Brief Counseling Intervention
   - 5 A’s of Cessation Counseling
     » Ask » Advise » Assess » Assist » Arrange
   - Stages of Change
   - Motivational Interviewing

3. Documentation & Follow-up
   - Documentation Form
   - Follow-up phone call
Resources

• The Maryland Tobacco Quitline – 1-800-QUIT NOW – is a FREE service provided by the Maryland DHMH that launched in June 2006.

• The Quitline provides telephone-based counseling to Maryland Residents who are 18 years of age and older and who are interested in quitting smoking.

• The Quitline is available seven days a week, from 8:00 a.m. to midnight. Services are available in English, Spanish, and additional languages. If desired, callers can also be referred to their local health department for cessation classes, in person counseling, and, upon qualification, for free medications.

• The Maryland Tobacco Quitline also provides information to non-smokers to assist a family member, a friend, or even a patient or client.
Resources

Fax to Assist
Health providers can also become a certified Fax to Assist provider in which they can register to have the Quitline make outgoing counseling calls to patients who want to quit. To become a certified Fax to Assist provider visit www.MDQuit.org
Contact Information

• *Jade Leung*, M.S. Chief, Division of Health Promotion and Education
  Center for Health Promotion, Education and Tobacco Use Prevention
  Family Health Administration
  201 W. Preston Street Baltimore, MD 21201
  Phone: 410-767-2919
  Fax: 410-333-7903
  E-mail: leungj@dhmh.state.md.us

• *Monika Driver*, M.P.H. Health Education Specialist
  Center for Health Promotion, Education and Tobacco Use Prevention
  Family Health Administration
  201 W. Preston Street Baltimore, MD 21201
  Phone: 410-767-1370
  Fax: 410-333-7903
  E-mail: mdriver@dhmh.state.md.us