# Smoking in Pregnancy: An Infant Mental Health Perspective

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#### Incidence:

- 9.2% of pregnant women in the US smoke
- 19.8% of pregnant women in Michigan smoke
- 28.7% of pregnant women smoke in NW Michigan

Antrim- 29.5% Benzie- 26.4%

Charlevoix- 35.0% Grand Traverse- 21.9%

Leelanau- 17.0% Kalkaska- 42.9

(2012 data)

### Effects of Smoking on Mother

- Spontaneous abortion
- Premature Labor/Birth
- Premature Rupture of Membranes
- Abruptio placenta
- Placenta previa

# Effects on the Fetus/Infant

- Intrauterine Growth Restriction
- Low Birth Weight
- Small for Gestational age
- Sudden Infant Death Syndrome
- Increased infant mortality rate

### **Effects on Child**

- Cleft palate and cleft lip
- Asthma, ear infections, respiratory infection
- Neurotoxicity and Neurobehavioral disturbances
- ADHD -like behavior
- Behavior problems
- Conduct disorders

# **Reproductive Toxins**

#### Carbon Monoxide:

- Retards growth
- Reduces brain weight
- Alters brain neurotransmitters levels (like dopamine, serotonin, acetylcholine)
- Causes cardiac hypertrophy and abnormal heart rate regulation
- Produces postnatal cognitive impairments in rats

#### **Toxins**

#### Nicotine:

- alters the autonomic nervous system
- reduces ability of the adrenal medulla to secrete adequate levels of epinephrine and norepinephrine
- delays the development of beta receptors in the heart Oxidant gases:
- Damages blood vessels and blood cells
   Lead

#### Nature of Nicotine Addiction

How nicotine works

Hormonal effects from nicotine

Adaptation and withdrawal

# **Maternal Tasks of Pregnancy**

- Safe Passage
- Acceptance of Others
- Binding in to the Child
- Giving of Oneself

# Factors that influence quitting in pregnancy:

- Maternal stress
  - -Having an unemployed partner
  - -Financial worries
  - -Problems with the family
  - -Domestic violence (42%vs 15% for nonsmokers)

# Prenatal Depression/Smoking

- Look at the association between PND symptoms and
  - Smoking behaviors
  - Beliefs and attitudes about smoking
  - Environmental factors that promote smoking
  - Nicotine addiction

# Prenatal Depression/Smoking

A higher score on the CES-D (>23) was associated with:

- -Nicotine addiction
- -Not thinking of quitting
- -Not expecting support from family or friends if they did decide to quit

#### **Stages of Readiness**

Precontemplation

Client does not believe that a problem exists

Needs evidence of a problem and its consequences

Contemplation

Client recognizes that a problem exists Is considering treatment

Needs support and encouragement to initiate treatment

Needs to understand the benefits of treatment

# Stages (cont.)

Ready for action

Client is ready to begin treatment

Needs referral/treatment programs

Negotiate and contract with the client to begin treatment

Action client begins treatment

Needs ongoing support and follow-up to assure treatment success

#### **Motivational Interviewing**

- Spirit of Motivational Interviewing
  - -Collaboration: A partnership; shared decision-making
  - -Evocative: Understand mother's goals. Evoke her own arguments for behavioral change
  - -Honors Autonomy: It is up to the mother to decide.

# Style of Motivational Interviewing

- Resist the righting reflex
- Understand the woman's motivation
- Listen with empathy
- Empower the client

### **Motivational Interviewing**

- Empathy: The person feels listened to and understood
- Sharing Information: ASK PERMISSION!
  - -respects autonomy and right to say "no"
  - -be prepared to shift to something else if they say "no"
- Ask initial understanding
- Personalize the message
- Assess current understanding

#### 5 A's

- Ask
- Advise
- Assess
- Assist
- Arrange

#### Ask

Identify smokers

"Looking over the 5 statements about tobacco on the questionnaire, which fits best with you?"

# Advise

• Strongly urge her to quit

"Quitting smoking is most important thing you can do to protect your health and your baby's health".

Highlight the many advantages of quitting.

"There are many benefits for you and your baby if you quit smoking. For example, it increases the chances of you having a normal weight baby."

#### Assess

"Are you willing to make a quit attempt in the next 2-4 weeks?"

5 Rs:

Relevance

**Risks** 

Rewards

Roadblocks

Repetition

#### **Assist**

- Help her develop skills and information resources
  - -Suggest and encourage use of problem-solving-skills
  - -Provide support to maintain the quit attempt
  - -Arrange social support in her own environment
  - -Provide pregnancy-specific self help materials

#### Partner involvement

- Emphasize importance of partner in helping mother to quit
- Give tips on how mother can quit if partner not ready to make a quit attempt
- Include in assessment of partner's capacity to support the pregnancy (maternal tasks)

#### **Community Resources**

- Describe current community resources
- Discuss successes of those resources
- Identify challenges to accessing those resources
- List gaps in continuum of care for pregnant women in your community (from pregnancy test to one year postpartum)
- Develop next steps

# Role of the Home Visitor

- Listen with empathy
- Develop/strengthen evidence-based skills to assist quit attempts
  - Infant Mental Health skills (with Reflective consultation)
  - Motivational Interviewing skills
  - 5 A's training

Advocate for community involvement!