Smoking Cessation Support in Pregnancy

Denise Cahill & Joan O’Sullivan
Health Promotion Department
HSE South
What comes to mind when you see this image?
Ireland is renowned internationally for our tobacco control measures.
By Mark Knight, reprinted with permission of the Herald and Weekly Times, Melbourne, Australia.
Smoking clogs the arteries and causes heart attacks and strokes

Smoking when pregnant harms your baby

Stopping smoking reduces the risk of fatal heart and lung diseases

Smoking may reduce the blood flow and causes impotence
But – how far have we really come?
Prevalence of Smoking in Pregnancy

• 20% of women in the UK self-report that they smoked through their pregnancy (IFS 2000)
• 25.3% of women in Scotland and 22% in Northern Ireland
• 18% of women in England and Wales smoked throughout their pregnancy (2002)
Maternal health behaviours during pregnancy in an Irish obstetric population and their associations with socio-demographic and infant characteristics

21% of women in Ireland smoke during their pregnancy,

23.2% of Irish women smoke

2% of non-Irish women smoke

<table>
<thead>
<tr>
<th>Maternal health behaviour</th>
<th>Social class I n (%)</th>
<th>Social class II n (%)</th>
<th>Social class III n (%)</th>
<th>Unknown category (unemployed/students) n (%)</th>
<th>Stay-at-home mothers'/home-makers' n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoking during pregnancy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>13 (9.3)</td>
<td>19 (14.8)</td>
<td>12 (24.5)</td>
<td>20 (35.1)</td>
<td>30 (39.5)</td>
</tr>
<tr>
<td>No</td>
<td>127 (90.7)</td>
<td>109 (85.2)</td>
<td>37 (75.5)</td>
<td>37 (64.9)</td>
<td>46 (60.5)</td>
</tr>
</tbody>
</table>
Factors associated with smoking during pregnancy in a sample of women in Dublin (n = 450)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Non-smokers, n (%)</th>
<th>Smokers, n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal age (years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;34</td>
<td>76 (89.4)</td>
<td>9 (10.6)</td>
</tr>
<tr>
<td>25–34</td>
<td>221 (82.8)</td>
<td>46 (17.2)</td>
</tr>
<tr>
<td>&lt;25</td>
<td>59 (60.2)</td>
<td>39 (39.8)</td>
</tr>
<tr>
<td>Highest maternal education qualification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Third level degree/postgraduate</td>
<td>139 (93.3)</td>
<td>10 (6.7)</td>
</tr>
<tr>
<td>Vocational/training course</td>
<td>98 (79)</td>
<td>26 (21)</td>
</tr>
<tr>
<td>Primary/secondary</td>
<td>119 (67.2)</td>
<td>58 (32.8)</td>
</tr>
<tr>
<td>Nationality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Irish national</td>
<td>48 (98)</td>
<td>1 (2)</td>
</tr>
<tr>
<td>Irish national</td>
<td>308 (76.8)</td>
<td>93 (23.2)</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married/cohabitating</td>
<td>338 (83)</td>
<td>69 (17)</td>
</tr>
<tr>
<td>Single</td>
<td>18 (41.9)</td>
<td>25 (58.1)</td>
</tr>
<tr>
<td>Parity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primiparous</td>
<td>178 (83.6)</td>
<td>35 (16.4)</td>
</tr>
<tr>
<td>Multiparous</td>
<td>178 (75.1)</td>
<td>59 (24.9)</td>
</tr>
<tr>
<td>Birth weight (kg)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;4</td>
<td>71 (93.4)</td>
<td>5 (6.6)</td>
</tr>
<tr>
<td>3-4</td>
<td>250 (80.9)</td>
<td>59 (19.1)</td>
</tr>
<tr>
<td>&lt;3</td>
<td>35 (53.8)</td>
<td>30 (46.2)</td>
</tr>
</tbody>
</table>
| Initiated breastfeeding postpartum  
  (f)                                          |                    |               |
| Yes                                           | 212 (93)           | 16 (7)        |
| No                                            | 144 (64.9)         | 78 (35.1)     |
To compare pregnancy outcomes between women who stopped smoking in early pregnancy and those who either did not smoke in pregnancy or continued to smoke.

Results
80% (n=1992) of women were non-smokers, 10% (n=261) had stopped smoking, and 10% (n=251) were current smokers.

Current smokers had higher rates of spontaneous preterm birth (10%) and small for gestational age infants (17%) than stopped smokers.

Conclusion
In women who stopped smoking before 15 weeks’ gestation, rates of spontaneous preterm birth and small for gestational age infants did not differ from those in non-smokers, indicating that these severe adverse effects of smoking may be reversible if smoking is stopped early in pregnancy.
Pregnant smokers are more likely to be ....

- Single
- Have fewer educational qualifications
- Unemployed
- In unskilled occupation
- Unplanned pregnancy
- Irregular or late attenders at clinics
- Living with a partner who smokes
- Mixing socially with smokers
- White and Caucasian
- Have smoked throughout a previous pregnancy
Partners?

• 5% of partners gave up smoking with the current pregnancy (1/20)
• A further 6% cut down and 12% smoked away from the pregnant women

Why a focus on Smoking in Pregnancy?

• Smoking causes small for gestational age infant and of spontaneous preterm birth and the more a woman smokes the greater the risk of both

• Women who smoke also have raised risks of pregnancy loss with increased rates of miscarriage, ectopic pregnancy, stillbirth, and neonatal death.

• From a population perspective, smoking is the most modifiable risk factor for adverse pregnancy outcomes in developed countries.
Cigarette smoking is the largest single modifiable risk factor for pregnancy related morbidity and mortality.
Harms to the mother

- Increased Risk of:
  - Spontaneous abortion
  - Ectopic pregnancy
  - Sickness due to hormone deficit
  - Ante-partum haemorrhage
  - Pre-term labour
  - Subsequent infertility / delayed conception
  - Earlier menopause
  - Cervical cancer
  - Osteoporosis
Harms to the baby

Low birth weight and low growth rates
Women who smoke in pregnancy are at 3 times greater risk of having a low birth weight baby.
On average 200 – 250g lighter

Low birth weight associated with increased risk of illness and death in infancy

Smoking is the single most significant predictor of likely low birth weight
Perinatal, neonatal and childhood implications

- Increased risk of:
  - Perinatal and neonatal mortality
  - Sudden Infant Death Syndrome (Cot death)
  - Respiratory disease
  - Delayed development / under achievement / attention deficit
  - Glue ear (ear infections)
  - Fertility problems in children of smokers (earlier menarche; menstrual cycle problems; undescended testes)
  - Possible link between father’s smoking and childhood cancer
Why do (pregnant) women smoke?

- ADDICTION
- For pleasure
- To cope with stress
- To control mood
- To keep weight down
- To take “time-out”
- To be sociable
Barriers to quitting smoking in pregnancy

- Young age
- Social disadvantage
- High tobacco dependence (majority smoke within 30 mins of waking)
- Social norm – around 80% of partners of pregnant smokers smoke
- Motivation? – want to give up or just put smoking on hold
- Lack of knowledge of the dangers of smoking to the baby
What Works?

In helping pregnant smokers to stop smoking
Successful quitters….

- Having a planned pregnancy – spontaneous quitters (25%)
- Planning own and baby’s health beyond pregnancy (for duration of child’s life)
- Experiencing morning sickness
- Becoming visibly pregnant
- Deciding to breast feed
- Support from partner / partner quitting too
- Higher educational level
- Smoking for fewer years, and smoking fewer cigs
- Having already got children with respiratory problems
- Social pressures
- Participation in Stop smoking programme
Knowledge about the dangers of smoking in pregnancy

- 81% **Non-smokers** thought smoking during pregnancy was dangerous to the unborn child
- 35% **Smokers** thought smoking during pregnancy was dangerous to the unborn child
- 68% agree that “these days pregnant women are under too much pressure to give up” (27% non-smokers)
- 80% agree that “there are things which are far worse for an unborn baby than smoking” (51% non-smokers)
What’s effective?

- A Health Professional advising a woman to quit
- A combination of information (written materials) and support from a Smoking Cessation Specialist
- Support from family & friends
- Specifically tailored interventions (knowledge and skills) more effective than education about harms
- High quality, high intensity support doubles the rate of smoking cessation in pregnant women
Advice does not work!
Activity

• In pairs – give advice –
• Tell your partner what you think is best for them
• Give direction
• Tell them what is best
Client-Centred Approach

• Non-judgemental
• Two way exchange
• Support not confrontation
• Education and empowerment
• Focus on skill development and not just information
• Facilitation to move forward
What is Motivation?

• Concerned with movement, Supply a motive to; cause one to act in a particular way; (latin) Motivus = moving.

• The system of forces that energise and direct our behaviour.

• Awareness is the key to effective motivation.
Motivation

- A state, not a trait
- Involves external and internal factors
- Multi – dimensional
- Fluctuates, not static
- Influenced by relationships
- Can be elicited and enhanced
Three Critical Components of Motivation

- **IMPORTANCE** (The benefits of change would outweigh the costs)

- **CONFIDENCE** (If I tried I could probably do it)

- **READINESS** (This is the right time)
Our Motivational approach to Smoking Cessation

“But, can you help me quit smoking?”
A ‘Motivational Approach’

One definition (Steve Rollnick) is:

“... adopting a counselling style that uses person-centred skills within a flexible structure for helping people to explore the pros and cons of change and to prepare for action”.

Another definition (Rollnick, & Miller 2002) is:

“a client-centred counselling style for eliciting behaviour change by helping clients to explore and resolve ambivalence”
The Spirit of your Support

- Collaboration not confrontation
- Eliciting not instilling
- Autonomy not authority
Resistance

Activity!
Roll with Resistance

- Avoid arguing for change
- Resistance is a signal to respond differently
OARS
Basic Skills of Motivational Interviewing

- Open Questions
- Affirmations
- Reflective Listening
- Summarising
Smoking Cessation Service in Cork University Hospital

Smoking Cessation Service in the Cork University Maternity Hospital since August 2008

Clients are referred to the Smoking Cessation Service by staff in the CUMH following a brief intervention and consent from the client.
Smoking Cessation Service CUMH

Individually tailored practical support & assistance *on site* for those seeking support in quitting

- Patients & Staff
- One-to-One on site followed up by telephone support
- Group support
- Literature
Statistics of our clients

• In total 732 clients of the CUMH have been referred to the Smoking Cessation Service.

• In the three year period that this service has been operating a total of 608 CUMH clients have received support from the Smoking Cessation Service.

• There have been 124 Unsuccessful contacts with clients to the Smoking Cessation Service from September 2008 – June 2012
## Client Age Group

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Number of clients</th>
<th>Percentage of Clients</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-23 years</td>
<td>110</td>
<td>15%</td>
</tr>
<tr>
<td>24-30 years</td>
<td>190</td>
<td>26%</td>
</tr>
<tr>
<td>31-35 years</td>
<td>269</td>
<td>37%</td>
</tr>
<tr>
<td>36-40 years</td>
<td>107</td>
<td>15%</td>
</tr>
<tr>
<td>41+ years</td>
<td>56</td>
<td>7%</td>
</tr>
</tbody>
</table>
Medical Card Holders

<table>
<thead>
<tr>
<th>GMS Status</th>
<th>No of Clients</th>
<th>% of Clients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>411</td>
<td>56%</td>
</tr>
<tr>
<td>No</td>
<td>267</td>
<td>37%</td>
</tr>
<tr>
<td>Unknown</td>
<td>54</td>
<td>7%</td>
</tr>
</tbody>
</table>
How the Service works

A Smoking Cessation Officer is on site in the CUMH one day per month, with follow-up (or first contact if clients have been discharged) support offered by telephone as follows

<table>
<thead>
<tr>
<th>Contact Number</th>
<th>1</th>
<th>2-5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Scale</td>
<td>First Contact</td>
<td>4 contacts in next 6 weeks</td>
<td>Contact at 3 months</td>
<td>Contact at 6 Months</td>
<td>Contact at 12 months</td>
</tr>
</tbody>
</table>
Quit Rates

33% of the clients of the Smoking Cessation Service in CUMH will quit smoking successfully.
Smoking Cessation Services

Smoking Cessation Officers (SCOs) offer individually tailored practical support & assistance for those seeking support in quitting

• One-to-One telephone support
• Group support
• Literature Dissemination
• Prevention & Education

For further information contact your local Health Promotion Office, 
www.quit.ie or 
the National Smokers Quitline on 1850 201 203
Contact Details

Denise Cahill
Denise.Cahill@hse.ie
021-4921641

Joan O’Sullivan
Joan.OSullivan2@hse.ie
022-58634