Linking systematic review, best practice and gender-based analysis methods to identify promising practices in smoking cessation for pregnant women

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EXPECTING TO QUIT: A BEST PRACTICES REVIEW OF SMOKING CESSATION INTERVENTIONS FOR PREGNANT AND POSTPARTUM GIRLS AND WOMEN (SECOND EDITION)

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Acknowledgments

The Project Team

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Smoking in preconception period, pregnancy, and postpartum remains an issue

- Approximately 13-27% of women smoke during pregnancy (spontaneous quitting confounds these data)
- 50% report a quit attempt
- 23-47% quit spontaneously in early pregnancy
- 25% relapse before delivery
- 70-90% relapse by one year postpartum

- Aboriginal women, young women, women with mental health and violence concerns, women who use alcohol and other substances more likely to be smokers
### Cessation Patterns

<table>
<thead>
<tr>
<th>Pregnant women more likely to quit</th>
<th>Pregnant women more likely to continue smoking</th>
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<tbody>
<tr>
<td>• More educated</td>
<td>• Women living on low income</td>
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<tr>
<td>• Older women</td>
<td>• Less social support</td>
</tr>
<tr>
<td>• Lighter smokers</td>
<td>• Heavier smokers</td>
</tr>
<tr>
<td>• Those with social support</td>
<td></td>
</tr>
<tr>
<td>• Those with non-smoking partners and family members</td>
<td></td>
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<tr>
<td>• Immigrant and minority (US) women</td>
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Approach to 2nd edition of ETQ review

3 research traditions


• Better practices - e.g. CTCRI

• Sex gender based analysis (SGBA) - prompted an additional chapter on three vulnerable under-researched groups


Systematic review method

• Study inclusion criteria
  – published studies evaluating the efficacy or effectiveness of a smoking intervention targeted at pregnant and/or postpartum girls or women
  – from Canada, USA, Europe, and Australia
  – published between January 1990 and March 2010

• Examined the quality of evidence, then the plausibility of using the intervention in real practice - based on efficacy and effectiveness
Study Classification Scheme

Studies Included in Review
(N = 97)

Effectiveness Criteria

Studies Showing No Effect
(n = 56)

- Insufficient
  - Preliminary finding: Not Recommended (evidence of ineffectiveness) (n = 48)
  - Preliminary finding: Inconclusive (n = 8)

Studies Showing an Effect
(n = 41)

- Sufficient/Strong
  - Preliminary finding: Shows Promise (n = 27)
  - Preliminary finding: Shows Promise (n = 0)

- Insufficient
  - Preliminary finding: Inconclusive (n = 0)
  - Preliminary finding: Shows Promise (n = 0)

Strength of Evidence Criteria

Insufficient

Preliminary finding: Not Recommended (evidence of ineffectiveness) (n = 48)

Sufficient/Strong

Preliminary finding: Shows Promise (n = 27)

Plausibility Criteria

Not Plausible

Preliminary finding: Not Recommended (evidence of ineffectiveness) (n = 48)

Plausible

Preliminary finding: Shows Promise (n = 27)

World of Evidence, including broader theoretical literature and expert opinion

Find Better Practice Recommendations
Results – systematic review method

- From 97 studies, we identified 14 interventions and 11 components of programs as effective
Fourteen Interventions to Recommend

- Gadomski et al., 2011
- Reitzel et al., 2010
- Heil et al., 2008
- French et al., 2007
- de Vries et al., 2006
- Ferreira-Borges, 2005
- Higgins et al., 2004
- Hegaard et al., 2003
- Donatelle et al., 2000
- Windsor et al., 2000
- Walsh et al., 1997
- O’Connor et al., 1992
- Hjalmarson et al., 1991
- Ershoff et al., 1989, 1990 & Mullen et al., 1990
Eleven Components to Include

- Quit Guides
- Counselling
- Buddy/Peer Support
- Partner counselling/social context
- Information
- Nicotine Replacement Therapies
- Personal Follow-up
- Other Follow-up
- Incentives
- Feedback about Biological Changes
- Groups
Changes since the First Edition in 2003

- Reported rates of smoking during pregnancy in Canada and the USA have slightly declined but postpartum relapse rates appear to be just as high

– Some new approaches in recommended studies:
  - 1 study on spontaneous quitters (Gadomski et al)
  - 4 studies include post partum (Higgins et al; French et al; Gadomski et al; Reitzel et al)
  - 4 studies using vouchers (Gadomski et al; Higgins et al; Heil et al; Reitzel et al)
  - 3 studies using brief intervention (Ferreira-Borges, Reitzel et al; French et al)
From our analysis, we identified 7 approaches to take in helping pregnant women to quit smoking.

Better practice is not an endpoint but a system, a mindset . . . good solutions to complex problems draw upon both science and experience; they build on the past, make sense in the present, and contribute to better solutions in the future; and they are subjective, situational, and evolving. CTCRI p.25
Seven Approaches

1. Tailoring
2. Woman-centred Care
3. Reducing Stigma
4. Relapse Prevention
5. Harm Reduction
6. Partner/Social Support
7. Integrating Social Issues
One example: 7. Integrate Social Issues into the Intervention

• Offer free cessation aids and referrals to community support organizations in the area

• In the context of many women’s lives, poverty, violence, lone motherhood and other factors affect health
SGBA methods

- SGBA . . . recognizes that there is a great deal of variation among women and among men – as well as between them – and analysts must therefore be careful to avoid making generalizations about all women or all men. Individual women and men as well as groups of women and men may be at greater risk of illness, have better access to health care, or respond differently to medication because of differences in income, class, race, language, sexual orientation, gender identity, education, geographic setting, age and/or life stage.
Identifying who is missed

• Final chapter, *Further Challenges: Focusing on pregnant smokers who are young, drinking alcohol and/or experiencing violence or trauma*
  - These subpopulations constitute three specific groups with significant challenges in smoking cessation during pregnancy and postpartum.
  - Our systematic review turned up little published research on interventions for pregnant and postpartum women in these three groups.
Characteristics and Challenges

– High correlation between smoking and trauma, this persists through pregnancy

– Standard approaches have not factored in the unique needs of those with trauma, so accessing help may seem unsafe to women with trauma histories

– Most-reported type of trauma affecting pregnant women is intimate partner violence (IPV) Average smoking rate among pregnant women with history of IPV ≥ 50% (Bailey & Daugherty, 2007; Fanslow, et al., 2008; Morland et al., 2007)
Trauma-Informed Interventions

• Links to Best Practices Approaches

  – **Tailoring** - models of trauma-informed care provide specific suggestions for tailoring a care environment to the needs of this population
  
  – **Women-Centred Care** - recognizes that smoking is a woman’s response to personal challenges (which often have a gendered nature, such as IPV) and is not an isolated decision about her pregnancy
  
  – **Social Issues Integration** - women experiencing trauma are typically burdened with a host of stressors (financial, legal, social, and so on)
Key ongoing issues

• More improvements in interventions aimed at smoking cessation for pregnant women are needed
• Sub-populations of pregnant smokers need more specific attention (Aboriginal girls and women, young women, etc)
• Attention required to both biological and social issues in cessation strategies
• More attention to the overlap of issues facing some groups of women
• Generic approaches will be less effective
Report and Materials Available


www.expectingtoquit.ca

To request copies of the report, please contact Phoebe Long, at 604-875-2424 ext. 5351 or plong@cw.bc.ca