Using Significant Others to Motivate Quit Attempts

Christi Patten, Ph.D.
Department of Psychiatry and Psychology
Mayo Clinic
Rochester, MN
Potential Role of Significant Others (SOs) in the Quitting Process

- About 80% of the population are nonsmokers (CDC, 2011)
- Many nonsmokers are willing to assist a smoker to quit and to seek help on behalf of a smoker (Patten et al., 2008; Zhu et al., 2006)
  - Without efforts to recruit them, about 5% of calls to quitlines are from SOs (North American Quitline Consortium, 2008)
- Many referrals to quitlines from SOs (Wood & Haskins, 2007)
What Happens When we Intervene with Significant Others?

- Evidence from prospective studies on social support and smoking cessation (Fiore et al., 2008)
- Mixed findings for clinic-based interventions involving SOs (Park et al., 2004)
- Efforts that tap existing social support networks appear to be more effective (Cohen et al., 2004)
New Role for SOs?

• SOs are targeted directly for intervention
• Training SOs as lay counselors has limited effectiveness (Patten et al., 2004; 2009)
• A broader, public health approach is use SOs to promote treatment engagement among smokers
• Substantial evidence indicates SOs can engage alcohol/drug users in treatment (Smith & Meyers, 2004)
Why Treatment Engagement?

• Most (~80%) smokers are not interested in quitting in the next 30 days (Velicer et al., 2007)
• About two-thirds of quit attempts in the population proceed without treatment (CDC, 2011; Shiffman et al., 2008).
• Quitline utilization and barriers
Significant Other Promotion of a Smoking Helpline

- Examine the efficacy of a telephone-based intervention for SOs on the proportion of smokers who enroll in the Minnesota QUITPLAN® Helpline compared to a control group over a 6 month follow-up
  - Control: written materials only (n=237)
  - Intervention: written materials + 3 weekly 10-30 min. telephone sessions (n=237)
  - Mailed assessments completed by SOs at baseline, week 4 (end of treatment) and at 6-months

_Patten et al., 2011; AJPM_
**Intervention**

**Goal:** provide SOs with information and skills needed to encourage smoker to call the Helpline

**Cohen’s Theory of Social Support**

**Session 1:** rationale for treatment, role of SO, information about the Helpline, education on nicotine dependence

**Session 2:** readiness to quit, supportive behaviors and statements (instrumental, informational, emotional)

**Session 3:** how to reinforce (shape) progress made by smoker, goals for after the program ends
Residence of Significant Others (N=534)

- Metro: 55%
- SE: 22%
- Central: 8%
- SC: 3%
- WC: 2%
- SW: 5%
- NW: 1%
- NE: 2%
- EC: 1%
- N. Central: 1%
## Baseline Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Intervention Group (n=267)</th>
<th>Control Group (n=267)</th>
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</thead>
<tbody>
<tr>
<td><strong>Female gender</strong>*</td>
<td>94%</td>
<td>89%</td>
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<tr>
<td><strong>Relationship to smoker</strong></td>
<td></td>
<td></td>
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<tr>
<td>Spouse/partner</td>
<td>32%</td>
<td>28%</td>
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<tr>
<td>Parent</td>
<td>18%</td>
<td>18%</td>
</tr>
<tr>
<td>Girlfriend/boyfriend</td>
<td>12%</td>
<td>19%</td>
</tr>
<tr>
<td>Child</td>
<td>10%</td>
<td>11%</td>
</tr>
<tr>
<td><strong>Lives with smoker</strong></td>
<td>49%</td>
<td>50%</td>
</tr>
<tr>
<td><strong>Contemplation Ladder score, mean (SD)</strong></td>
<td></td>
<td></td>
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<tr>
<td>0-3 (low)</td>
<td>44%</td>
<td>39%</td>
</tr>
<tr>
<td>4-6 (medium)</td>
<td>40%</td>
<td>46%</td>
</tr>
<tr>
<td>7-10 (high)</td>
<td>16%</td>
<td>15%</td>
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</tbody>
</table>

* P=0.031
Helpline Utilization through 6 months follow-up by Study Group

% of smokers who enrolled

Control: 8.6
Intervention: 16.1

Adjusted OR=2.04, 95% CI: 1.19-3.49, P=0.010
SO Treatment Compliance and Smoker Helpline Utilization

Number of treatment sessions completed by SO

% of smokers who enrolled

0-2 sessions
3 sessions

P=0.004

3.0
20.4

0
5
10
15
20
25
30
Qualitative Analysis

• Motivators to participation
  – Smoker’s health
  – Learn new strategies to help

• What was helpful?
  – Readiness to quit ladder (conversation starter)
  – Education on nicotine dependence
  – Shaping

Brockman et al., 2012
Addiction Research & Theory
New Effectiveness Study Underway

• Enroll 1020 SOs in MN
• To enhance translation, implement protocol within the ongoing services of the QUITPLAN Helpline
• Streamlined version of the intervention (i.e., one call) vs. 3 calls vs. control
• Measure quit attempts among the smokers
• Cost-effectiveness analysis

Funding: ClearWay Minnesota
How might this program be implemented?

• Change the target of health promotion programs
• Change the flow of how smokers get to treatment

Purposes:
  – Bring more smokers into the quitting process
  – More successful quit attempts
How might this program be implemented?

- Offer program to companies/employers
  - Market program to nonsmoking employees and dependents
  - Corporate wellness programs
  - Intervention delivery and outcomes
  - Web site SO intervention to promote quitline use among employees of 3 corporations (Muramoto et al., 2010; AJPM)
How might this program be implemented?

• Quitlines
  – Campaigns/marketing
  – More directive written materials marketing quitline
    • About $\frac{3}{4}$ of quitlines send out written materials to family members/friends of tobacco users
  – Coaching services for nonsmokers
  – Involve SO as part of smoker counseling

• Role of SOs seen in health care practices (e.g., Garces et al., 2011)