Successful Cessation: Exploring Quit Attempts at Lehigh Valley Hospital's Tabacco Treatment Program.

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SUCCESSFUL CESSATION
Exploring Quit Attempts
at
Lehigh Valley Hospital's
Tobacco Treatment Program

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Tobacco Treatment Program

A comprehensive approach to nicotine dependence that combines behavioral modification, psychosocial support, relapse prevention and pharmacologic therapy
Nicotine Dependence

Environmental or Social (stress relief)

Behavior modification

Physiological (need for Nicotine)

Pharmacologic support

Emotion (emotional need)

Psychosocial support
Tobacco Treatment Program

The twelve-month counseling program provides assessment of nicotine dependence, education, cessation and relapse prevention strategies through face-to-face counseling and phone follow-up.
Tobacco Treatment Program

Proactive contact and interventions occur at:

- Assessment interview
- Quit date
- One week
- One month
- Three months
- Six months
- Twelve months

Care plans are developed through an interactive process between the patient, the counselor, and the referring physician.
Tobacco Treatment Program
Cumulative Client Enrollment:
January 1, 2003, to June 30, 2007

Study participants (n=546)
Demographics (N=300)

- Includes patients joining the program January, 2003, and December, 2005
- Enrolled in program at least 30 days or longer
  - Median survival = 212 days
- Received one or more counseling sessions
- 51.5% female
- 48.5% male
- Mean age
  - 50.16±1.90 years
Demographics

- History of 1 or more psychiatric diagnoses
  - 45.5% (N=113)

- Mean Fagerstrom Score
  - $5.80 \pm 1.90$
    - Nicotine dependence scale of 0-10 with 10 being highly addicted

- Mean length of time smoking
  - $29.43 \pm 14.48$ years

- Program attrition rate
  - 61% (N=184)
# Tobacco Use

<table>
<thead>
<tr>
<th></th>
<th>Stayed in Tobacco Treatment Program</th>
<th>Discontinued Tobacco Treatment Program</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age first used tobacco</td>
<td>16.63 ± 4.94</td>
<td>15.84 ± 5.23</td>
<td>0.247</td>
</tr>
<tr>
<td>Age used tobacco regularly</td>
<td>16.83 ± 4.84</td>
<td>14.93 ± 6.35</td>
<td>0.015</td>
</tr>
<tr>
<td>How long tobacco used (years)</td>
<td>32.39 ± 13.16</td>
<td>27.68 ± 14.98</td>
<td>0.014</td>
</tr>
<tr>
<td>How many cigarettes smoked per day?</td>
<td>15.65 ± 12.98</td>
<td>19.46 ± 14.40</td>
<td>0.021</td>
</tr>
</tbody>
</table>
Differences between enrollees that Discontinued Therapy (DT) or Continued Therapy (CT)

*Not statistically significant*

- Age
  - DT and CT mean age of 50 years, p=0.982

- Gender
  - 86.5% of males and 84% of females were DT, p=0.624

- Psychiatric Treatment History
  - Trend toward DT (50.32%) more likely to have history than CT (37.78%), p=0.057 [power=0.567]
Discontinued Therapy (DT) & Continued Therapy (CT)

Not statistically significant
- Reported emotional smoking (stress, relax, cheer-up)
  - High probability both DT (93.17%) and CT (96.67%), p=0.390 [power=0.602]
- Report habit smoking (after meal, telephone, and driving)
  - High probability both DT (73.9%) and CT (72.2%), p=0.768 [power=0.482]
Participants who stayed in the program were:

- 3.5 times (95% CI: 2.05, 5.84) more likely to smoke heaviest in the afternoon or evening and
- 2.4 times (95% CI: 1.47, 3.95) more likely to indicate the afternoon or evening cigarette as most difficult to give up.
Patient States Important to Stop

Discontinued program

Continued in program

Little to moderate importance/motivation

Very to extremely important/motivated

Patient States Motivated to Stop

Discontinued program

Continued in program

Little to moderate importance/motivation

Very to extremely important/motivated
Patients States Able to Stop

Discontinue program

Continued in program

Little to Moderate Very to Extremely

<table>
<thead>
<tr>
<th>0</th>
<th>20</th>
<th>40</th>
<th>60</th>
<th>80</th>
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<td></td>
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</table>

0-40% Little to Moderate
40-100% Very to Extremely
Patients discontinuing the program were…

- More likely to start using tobacco regularly at an earlier age
- More likely to smoke more cigarettes per day
  - But not necessarily more than 1 pack per day
- 2.5 times more likely to report feeling support by one or more non-family members \((OR \ 2.45, CI \ 1.26, \ 4.73, \ p=0.007)\)
- 3.5 times more likely to report smoking the heaviest in the \((AM \ OR \ 3.46, CI\ 2.05, \ 5.84, \ p<.001)\)
Discussion

Patients staying in the program were…

- 3 times more likely to report feeling support by one or more family members (spouse, children, parent and/or sibling) (OR 2.9: CI 1.5, 5.58, p=0.001)

- 2.4 times more likely to indicate the afternoon or evening cigarette as the most difficult to give up (OR 2.45: CI 1.47, 3.95, p=.001)
Discussion

- A patient’s sense of motivation, importance and confidence in stopping tobacco use reported upon entering a tobacco treatment program may not be predictable indicators of whether the patient will maintain or drop-out of the program.

- The Fagerstrom scoring system, especially cigarette smoking patterns, may be considered a predictor of continuation in a tobacco treatment program.
Discussion

- Predicting continuation using the Fagerstrom score is strengthened when family support and age of first regular tobacco use is also considered.

- Patients enrolled in a tobacco treatment program should be strongly advised to seek support from family members. In some cases it may be plausible to include family members in counseling sessions.
Discussion

Limitations

- Did not account for dynamics of patient-counselor relationship (further investigation will occur through patient survey).

- Predicting continuation in program correlating with children living at home needs further investigation.
Tobacco Treatment Program
Successful Quit Attempts
Cumulative Rates

January 1, 2003, through June 30, 2007

Quit Attempt Rate: % Based on Number of Clients Eligible to Quit During a Specific Time Period
Tobacco Treatment Program
Successful Quit Attempts
Choice Plus Covered Enrollees
January 1, 2006, through June 30, 2007

Quit Attempt Rate: % Based on
Number of Clients Eligible to Quit
During a Specific Time Period
Questions ???