Developing a tailored tobacco treatment program for individuals with schizophrenia: A mixed-methods study

Presenters:
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Declaration of competing interests
The speakers have no conflicts of interest to disclose

Objectives
Discuss the need for tailoring existing evidence-based tobacco treatment for individuals with schizophrenia
Describe best practice approaches for tobacco treatment
Identify psychosocial and pharmacological components for tobacco treatment among those with schizophrenia
**Why Address Tobacco Use among Individuals with Schizophrenia?**

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Percent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schizophrenia</td>
<td>74</td>
</tr>
<tr>
<td>Bipolar disorder</td>
<td>66</td>
</tr>
<tr>
<td>Major Depression</td>
<td>57</td>
</tr>
<tr>
<td>Kentucky</td>
<td>31</td>
</tr>
<tr>
<td>US</td>
<td>23</td>
</tr>
</tbody>
</table>

**Smoking rates among individuals with Chronic Mental Illnesses, Central Kentucky**


**Diagnosis-specific reasons for smoking among those with mental illness**

"Variations in smoking between the different diagnostic groups were also found, in particular in the process of smoking itself, the nature of the nicotine dependence as predominately physical or psychological, attitudes towards the quitting process and sense of control, and the degree of significance of existential factors.... Differences in perceptions and patterns of use suggest that intervention may be more effective if psychiatric diagnosis is also taken into consideration." (pg. 93)


**Evidence-Based Recommendations for Tobacco Treatment**

Programs should be 7-10 sessions

- Components should include:
  - Introduction to tobacco history and prevalence of use
  - Education about properties of nicotine, health effects of tobacco and addictive nature of smoking
  - Review of reasons why people smoke
  - Education about ways one can quit smoking, use of medication, and development of a quit plan.

Strong dose-response relationship between intensity of program and success!
Counseling and Behavioral Therapies

- Psychoeducation
- Problem Solving
- Skills Training (coping skills)
- Relapse Prevention
- Social Supports

Encourage the Use of Pharmacotherapy

- Every smoker should be encouraged to use smoking cessation medications (with the exception of special circumstances like pregnancy)
- Because individuals with mental illness are more nicotine dependent, consider individualizing medications by:
  - Higher dosages
  - Longer durations
  - Combinations

Project aims/goals

- Explore perspectives on effective tobacco treatment approaches for individuals with schizophrenia
- Describe ratings of desirability, acceptability, and applicability of components of a treatment program for individuals with schizophrenia
Intervention description

• Prospective snowball sampling of:
  • Tobacco treatment specialists from different disciplines (2 Physicians, 2 Nurses, 2 Psychologists)
  • Former smokers with schizophrenia (n=4)
  • Current smokers with schizophrenia (n=8)

• Semi-structured telephone and face-to-face Interviews (30mins-1hr)

• Desirability, applicability, and acceptability rating scales for specific intervention components (on scale of 0 ‘do not include’ to 4 ‘definitely include’).

• Analysis:
  • Qualitative: Thematic analysis
  • Quantitative: Mean summary scores of ratings with Kruskal Wallis tests to examine differences between treatment providers, former, and current smokers with schizophrenia groups.

INTERVIEW GUIDE QUESTIONS

What are some of the challenges those with Schizophrenia face when stopping smoking?
  - Do you think those with Schizophrenia face different challenges when stopping smoking compared with those without mental illness?
  - What ways if any/what way do you think stopping smoking improves specific people with schizophrenia's quality of life?
  - Have you found that people with schizophrenia's quality of life?

Do you think it is important to have a smoking cessation program just for those with Schizophrenia (as opposed to having a smoking cessation group with the general public)?
  - For what reasons would you provide a smoking cessation group just for those with Schizophrenia?
  - For what reasons would you provide a smoking cessation program for those with Schizophrenia?

What aspects of smoking cessation program do you believe would be most important in helping those with Schizophrenia to successfully stop smoking program?

SAMPLE COMPONENT RATING GUIDE

<table>
<thead>
<tr>
<th>Component</th>
<th>Scale (0 being do not include to 4 definitely include)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge about smoking and Schizophrenia</td>
<td>Least score</td>
</tr>
<tr>
<td>Topics include:</td>
<td>Applicable to cas:</td>
</tr>
<tr>
<td>• Necessity of smoking to individuals with</td>
<td>Acceptable in cas:</td>
</tr>
<tr>
<td>Schizophrenia and other chronic mental issues</td>
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</table>
Qualitative findings

Recommendations for intervention development

**Former smokers (2 men & 2 women):**

**Format:** dx of schizophrenia only rather than general public

**Education:**
- health consequences of smoking
- second hand smoke exposure

**Medications:** Nicotine Replacement Therapy

**Exercise classes**

Recommendations for intervention development

**Current smokers (4 men and 4 women):**

**Format:** dx of schizophrenia only rather than general public

**Education:** health consequences of smoking; films and videos

**Medications:** NRT; medications “to prevent nervousness”

**Counseling:**
- Stress reduction
- Coping with nicotine withdrawal
- Peer support
- Encouragement
- Adjustment to a non-smoking lifestyle: alternate activities; social skills; hobbies
Recommendations for intervention development

Providers (2 men & 4 women):

Format: dx of schizophrenia only rather than general public
Education: healthy lifestyle, diet/nutrition, triggers for smoking; relapse prevention
Medications: NRT- be aware of the dosage needs of people with schizophrenia
Counseling:
  • Strengths-based recovery orientation: Believe in the patient’s ability to succeed
  • Peer support: use peers as a positive social network
  • Brief motivational interviewing

Intervention delivery recommendations: Providers

Take a longitudinal approach: Rolling enrollment
Harm reduction: reduce to quit
Master coping skills before selecting a quit date
Patients should have a "portfolio" of coping skills to draw on
Providers must be role models—don’t smell like smoke!
Monitor antipsychotic dosage and adjust as needed
Offer encouragement and be positive

Quantitative findings
Ratings* of Program Components (N = 18)

Ratings are based on means scores of desirability, acceptability, and applicability scores (Scale of 0-4).
No significant difference between groups.

Ratings* of Education Components (N = 18)

*Ratings are based on means scores of desirability, acceptability, and applicability scores (Scale of 0-4).
No significant difference between groups.

Ratings* of Skills Training Components (N = 18)

*Ratings are based on means scores of desirability, acceptability, and applicability scores (Scale of 0-4).
No significant difference between groups.
Ratings* of Relapse Prevention Components (N = 18)

<table>
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<th>Component</th>
<th>Rating</th>
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<tbody>
<tr>
<td>Healthy Eating Advice</td>
<td>3.7</td>
</tr>
<tr>
<td>Craving/Withdrawal</td>
<td>3.6</td>
</tr>
<tr>
<td>Smoking/Metabolism</td>
<td>3.4</td>
</tr>
<tr>
<td>Probing Smoking/Cues</td>
<td>3.5</td>
</tr>
<tr>
<td>Parental Smoking</td>
<td>3.6</td>
</tr>
<tr>
<td>Weight Concerns</td>
<td>3.3</td>
</tr>
</tbody>
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*Ratings are based on means scores of desirability, acceptability, and applicability scores (Scale of 0-4).

No significant difference between groups.

Conclusions

Qualitative analysis were confirmed in ratings of program components.

Tobacco treatment for individuals with schizophrenia should incorporate both behavioral and pharmacotherapy components.

It is important to educate individuals with schizophrenia on pharmacotherapies in order to maximize success in cessation attempts.

Final Q & A