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 predominantly 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=6)
  - 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 while stopping smoking?
- Do you think that those with schizophrenia have a different challenge when stopping smoking as compared to those without schizophrenia?
- Have you ever had a person with schizophrenia smoke cigarettes?
- Do you think that those with schizophrenia have a different challenge when stopping smoking as compared to those with other mental illnesses (e.g., depression or anxiety disorder)?
- How do you think stopping smoking can help improve people’s quality of life and mental health?
- In what ways may integrating smoking cessation interventions be beneficial for people with schizophrenia?
- How do you think stopping smoking can help improve people’s quality of life?
- Do you think it is important to have a smoking cessation program that focuses on those with schizophrenia?
- For mental health care providers, what are the most important aspects of a smoking cessation program for those with schizophrenia?
- What specific aspect(s) or component(s) of a smoking cessation program do you believe would be most important in helping those with schizophrenia to successfully stop smoking?

Sample Component Rating Guide

<table>
<thead>
<tr>
<th>Components</th>
<th>Good (1-3)</th>
<th>Fair (4)</th>
<th>Poor (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education about smoking and schizophrenia (MESES 14)</td>
<td>Good score</td>
<td>Fair score</td>
<td>Poor score</td>
</tr>
<tr>
<td>- Importance of smoking and its effects on health and well-being</td>
<td>Good score</td>
<td>Fair score</td>
<td>Poor score</td>
</tr>
<tr>
<td>- Importance of smoking and its effects on mental health</td>
<td>Good score</td>
<td>Fair score</td>
<td>Poor score</td>
</tr>
<tr>
<td>- Importance of smoking and its effects on social and other negative outcomes</td>
<td>Good score</td>
<td>Fair score</td>
<td>Poor score</td>
</tr>
<tr>
<td>- Importance of smoking and its effects on family and friends</td>
<td>Good score</td>
<td>Fair score</td>
<td>Poor score</td>
</tr>
<tr>
<td>- Importance of smoking and its effects on other negative outcomes</td>
<td>Good score</td>
<td>Fair score</td>
<td>Poor score</td>
</tr>
</tbody>
</table>

Chizimuzu T.C. Okoli, PhD, MSN, MPH, RN;
Peggy El-Mallakh PhD, RN, PMHNP-BC
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.

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Ratings* of Relapse Prevention Components (N = 18)

<table>
<thead>
<tr>
<th>Component</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy</td>
<td>3.7</td>
</tr>
<tr>
<td>Craving</td>
<td>3.6</td>
</tr>
<tr>
<td>Avoiding</td>
<td>3.4</td>
</tr>
<tr>
<td>Averting</td>
<td>3.5</td>
</tr>
<tr>
<td>Partner</td>
<td>3.6</td>
</tr>
<tr>
<td>Weight</td>
<td>3.3</td>
</tr>
</tbody>
</table>

*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.