Meta-Analysis Finds Quitting Smoking More Effective Against Depression than Medication

MH benefits of cessation questioned

Smoking substantially increases the risk of developing cancer, cardiovascular and respiratory diseases. However, the association between smoking and mental health has been less clear. This issue has been further clouded by the fact that smokers believe that smoking helps alleviate depression and anxiety and provides stress relief. As a result, many mental health professionals do not encourage cessation, believing that quitting might be detrimental to their clients’ mental health. Since views about smoking predict quit efforts, it is vital to investigate the link between smoking and perceived mental health benefits.

Study examines MH benefits

To address these questions, UK researchers investigated change in mental health after smoking cessation as compared with continuing to smoke. Their meta-analysis included 26 longitudinal studies that assessed adult mental health before smoking cessation and at least six weeks after cessation. The included studies used questionnaires designed to measure anxiety, depression, mixed anxiety and depression, psychological quality-of-life, positive affect, and stress. Follow-up mental health scores were measured between seven and nine weeks after baseline.

In conclusion

The researchers concluded that quitting smoking is associated with mental health benefits. Even more significant, they found that the effect sizes (measures of the magnitude or strength of the treatment) were equal or larger than those of antidepressant treatment for mood and anxiety disorders. Specifically, the researchers found that “Anxiety, depression, mixed anxiety and depression, and stress significantly decreased between baseline and follow up in quitters compared with continuing smokers.” Additionally, “Both psychological quality-of-life and positive affectivity were significantly higher between baseline and follow up in quitters compared with continuing smokers.” For more information, you may view this study at www.bmj.com/content/348/bmj.g1151


About Tobacco Free Florida

The Tobacco Free Florida AHEC Cessation Program at FSU College of Medicine is working to expand access to treatment for tobacco dependency, especially for people with mental health and substance abuse disorders. Like other smokers, people with mental illness ARE interested in quitting and are able to quit when supported with evidence-based treatments. We have resources available including scholarships for staff training, technical assistance with incorporating services into your organizations and other financial and educational resources to support a tobacco-free project.

If you would like information about helping your clientele quit tobacco, please contact Andrie Aubrey at FSU College of Medicine at 850-645-6459 or andrie.aubrey@med.fsu.edu

The Freedom Express is a consumer oriented newsletter to highlight success stories of individuals with mental health or other disabilities who have quit using tobacco. We sought to share a message of hope that, when supported with evidence-based interventions, all individuals have the capacity to quit tobacco.

In addition to highlighting individuals, we also wanted to feature our partners at mental health organizations, substance recovery programs, and Centers for Independent Living who offer services to help people quit tobacco and promote tobacco free policies as part of Tobacco Free Florida. By highlighting the success of our community partners, we hoped to encourage other organizations to incorporate the treatment of tobacco dependency along with the behavioral health services they are providing.

Lastly, throughout each publication, we aim to address the rampant myths about people with mental health problems ‘benefiting’ from their nicotine addiction or being incapable of quitting. We wanted to combat the idea that smoking cigarettes was an effective way of dealing with stress and offer practical help and access to resources for people when they are ready to quit.

This idea was the impetus for our provider issue, which was written specifically for physicians, nurses, counselors, peer specialists and other providers who are working in the field of mental health, substance abuse recovery, and rehabilitation services. This issue will provide up-to-date, credible information about the relationship between tobacco cessation and mental health, as well as effective strategies for helping people quit tobacco while safeguarding their mental health, sobriety, and overall quality of life. It is our hope that this information will help you be more effective in helping your clients learn more about the benefits of quitting and that it will support you in promoting a tobacco-free culture within your practice and your organization.

Please share this issue with your colleagues and contact us if you would like additional copies. We are always interested in your feedback and suggestions and you may reach me at andrie.aubrey@med.fsu.edu

I would very much like to hear from you and learn more about how Tobacco Free Florida’s cessation program at the FSU College of Medicine can assist your organization in reducing the burden of disability, preventable deaths, and reduced quality of life caused by tobacco.

Andrie Aubrey

A Message From the Director
should You offer your client NRT?

If you’ve been searching for a quick and simple test to determine whether a smoker will benefit from nicotine replacement therapy (NRT), look no further. The Fagerström Test for Nicotine Dependence is a standardized instrument that assists clinicians in assessing a smoker to determine whether NRT is warranted. The higher the Fagerström score, the more intense the smoker’s physical and/or psychological dependence on nicotine. The Fagerström assessment will also provide guidance about correct doses of NRT.

To use the questionnaire, ask each question and add your client’s score, then use the following guidelines:

- 0 to 3 indicates low nicotine dependence.
- At this level of mild physical dependence, your client will most likely be successful without NRT, although it is recommended to incorporate nicotine replacement therapy (e.g., a patch or gum) if your client is willing to participate. Counseling, however, is not indicated at this time.
- 4 to 6 indicates a medium nicotine dependence.
- At this moderate physical dependence level, your client has a definite need for counseling and NRT or other pharmacotherapy should be recommended.
- 7 to 10 indicates high nicotine dependence.
- At this level, your client has a strong physical dependence and will require counseling, NRT, nicotine replacement therapy, and other pharmacotherapy if the use of NRT is feasible.

The Fagerström Nicotine Tolerance Questionnaire

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes (1)</th>
<th>No (0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How many cigarettes do you smoke per day?</td>
<td>10 or less (0)</td>
<td>11-20 (1)</td>
</tr>
<tr>
<td>2. How soon after you wake up do you smoke your first cigarette?</td>
<td>0-5 minutes (3)</td>
<td>10 minutes (2)</td>
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<tr>
<td>3. Do you find it difficult to refrain from smoking in places where smoking is not allowed (e.g., hospitals, government offices, movies, etc.)?</td>
<td>Yes (1)</td>
<td>No (0)</td>
</tr>
<tr>
<td>4. Do you smoke more during the first hours after waking than during the rest of the day?</td>
<td>Yes (1)</td>
<td>No (0)</td>
</tr>
<tr>
<td>5. Which cigarette would you be most unwilling to give up?</td>
<td>First in the morning (1)</td>
<td>Any of the others (0)</td>
</tr>
<tr>
<td>6. Do you smoke even when you are very sick?</td>
<td>Yes (1)</td>
<td>No (0)</td>
</tr>
</tbody>
</table>

Total Score =

Smokers don’t want to quit and other misperceptions

A recent study by Himelhoch, Riddle & Goldman (2014) examined clinicians’ perceived barriers to implementing evidence-based smoking cessation practices in community mental health sites. The study surveyed 416 community mental health professionals from four counties in Maryland. The purpose of this study was to determine the barriers that clinicians perceived in providing smoking cessation services, such as NRT and counseling, to their clientele. While a similar study has yet to be published based on data from clinicians in Florida; addressing the barriers identified in this study will prove helpful in advancing tobacco cessation efforts. The authors reviewed the major perceived barriers: clinicians are not interested in quitting; NRT (nicotine replacement therapy such as patch or gum) is too expensive; and expenses associated with counseling make it inaccessible.

Addressing misperceptions

Do smokers want to quit? According to the study, the most commonly reported barrier to providing treatment was the belief by clinicians that smokers with mental illness are not interested in quitting. This belief is at odds with several studies suggesting that individuals with mental illness are as interested in quitting smoking as those in the general population. For example, in their 2009 study to assess motivation to quit smoking, Sin, Hulse & Tait compared motivation to quit in the general population to that of individuals with mental health disorders. Based on the results, they concluded that smokers with mental health disorders were as motivated as those without disorders. Similarly, in 2010, Sin, Hulse & Tait conducted a study to examine smoking cessation among smokers who were hospitalized. The authors found that in comparison, people with mental health disorders who were hospitalized experienced the same levels of motivation to cease smoking and to use NRT as those without mental health disorders.

Is the cost of NRT too high? While the cost for NRT may be high in Maryland, Tobacco Free Florida provides NRT to tobacco users who are participating in the program’s free and easy ways of quitting.

Motivating the motivational interview

The motivational interview is an interactive counseling style that has proven effective in tobacco cessation efforts. In this process, the clinician guides clients towards addressing and resolving ambivalence. Your goal is to help your client begin ‘change talk’, which is the beginning of behavior change. The more your client talks about the reasons for change, even if it is in favor of maintaining the behavior, the more likely it is that he or she will actually make a change.

EARS, the tool explained below, stands for Explore, Affirm, Reflect and Summarize. Using this strategy, you can effectively lead to change talk. The more your client talks about the reasons for change, even if it is in favor of maintaining the behavior, the more likely it is that he or she will actually make a change.

Explore ask questions to help you understand your client’s perspective and what he or she is saying. Use open ended questions so that your client elaborates.

Affirm recognize strengths and efforts; communicate what you see as special about the client.

Reflect reflections let the client know that you are listening and encourage continuation of a thought or idea. Reflections can involve simply restating, paraphrasing or subtly emphasizing ambivalence.

Summarize provide a summary of the reflections with a cohesive theme. Focus on change talk you’ve heard but don’t neglect to include the challenges too. Summaries help your client see the big picture. Ask if the summary is accurate. Ask client to give thoughts on what was discussed.

Motivational Interviewing in Action

The following fictional scenario employs several techniques of MI to elicit change talk, even though the client states he is not ready to quit.

Client – I’d really like to quit, but I’m so stressed out right now that it is not the right time.

Counselor – You want to quit smoking and, at the same time, you want to wait until you’re feeling better before you try to quit. (Reflect)

Client – Yes, exactly. I know there are good reasons for this, but I want to quit it’s just not the right time.

Counselor – I understand and respect that now is not the right time for you to make this change. But if you did decide to quit smoking at some point in the future, how might your life be better? (Explore/Ask open-ended questions) Client – I don’t know. I guess I’d feel better. I hate coughing so much... it would be nice not to have this nagging cough. To be honest, I could use the money, too – it adds up, you know?

Counselor – I see, so quitting will make it easier to breathe, which will help clear up your cough. You’ll also get to spend your money on things that are important to you. (Reflect)

Those benefits are important to you. Would you mind if I share some information about how smoking increases stress? (Ask Permission)

Client – Smoking increases stress? It seems to be the only thing that makes me feel better.

Counselor – At this point, the counselor describes how nicotine dependency can cause mood fluctuation and the apparent relaxant effects of smoking only reflects the reversal of the tension and irritability that develop during nicotine withdrawal.

Client – That’s hard to believe but it makes sense. I had no idea...

Counselor – That’s pretty surprising, isn’t it? (Empathy/Understanding). I’d like to stop right here and summarize what we’ve talked about. You’d like to quit so you can stop coughing and save money. At the same time, you wanted to put off quitting until you were feeling less stress because you believed that smoking was helping relieve your stress. You were surprised to learns that the feelings of stress relief could actually be the interruption of nicotine withdrawal. Did I miss anything? (Summarize)

Client – No, that’s right.

Counselor – You’ve identified some reasons for quitting that are important to you. (Reflect) I know from our past work together that when you put your mind to something, you figure out a way to make it happen. (Action) I am here to help teach you that goal when you are ready. What are your thoughts about what we’ve discussed? (Empathy/Change)

Is Tobacco Cessation Beneficial for Persons with Mental Illness?

By now, we are all aware that smoking is associated with an increased risk of heart disease, lung cancer, stroke, diabetes and many other diseases. What isn’t yet widespread knowledge is the disproportionate number of smokers with mental illness and the effects that smoking has on their treatment and recovery.

Here’s what research reveals:

- Among persons with mental illness compared with any mental illness, smoking contributes to more deaths than the primary behavioral health disorder.
- Smoking also has numerous physical, psychological, social, employment and quality of life consequences for individuals with mental illness.

Benefits of cessation

Tobacco cessation yields many benefits such as improved health and quality of life; improved mental health; decreased in social isolation; and improved employability.

Additionally, tobacco cessation treatment programs provided during addictions treatment was associated with a 25% increased likelihood of long term abstinence from alcohol and illicit drugs.

The drugs

In light of these facts, it is obvious that the answer to the question of whether tobacco cessation among persons with mental illness is beneficial is a resounding YES!
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Should You Offer Your Client NRT?

The Fagerström Nicotine Tolerance Questionnaire

1. How many cigarettes do you smoke per day?
   - 0 or less (0)
   - 11-20 (1)
   - 21-30 (2)
   - 31-60 (3)
   - 61 or more (4)

2. How soon after you wake up do you smoke your first cigarette?
   - 0-5 minutes (1)
   - 10 minutes (2)
   - 30 minutes (3)
   - 60 minutes (4)

3. Do you find it difficult to refrain from smoking in places where smoking is not allowed (e.g. hospitals, government offices, movies, etc.)?
   - Yes (1)
   - No (0)

4. Do you smoke more during the first four hours after waking than during the rest of the day?
   - Yes (1)
   - No (0)

5. Which cigarette would you be most unwilling to give up?
   - First in the morning (1)
   - Any of the others (0)

6. Do you smoke even when you are very unwell?
   - Yes (1)
   - No (0)

**Total Score**

Scores:
- 0 to 3 indicates low nicotine dependence.
- 4 to 6 indicates a medium nicotine dependence.
- 7 or 8 indicates a high nicotine dependence.

Next steps: If your client scores 4 or higher, then offer NRT. NRT, client has a definite need for counseling and NRT is not cost effective. If your client scores 3 or lower, then offer counseling. NRT, replacement therapy such as patch or gum) is too expensive; and expenses in Florida; addressing the barriers identified in this study will prove helpful.

Motivating Interviewing in Action

The following fictional scenario employs several techniques of MI (client change talk, even though the client states he is not ready to quit.

Counselor – You've identified some reasons for quitting that are important to you. (Reflect) Client – Yes, exactly. I know there are good reasons. I want to but it's just not the right time.

Counselor – You want to quit smoking and, at the same time, you want to wait until you're feeling better before you try to quit. (Reflect) Client – Yes. I understand and respect that now is not the right time for you to make this change. But if you did decide to quit smoking at some point in the future, how might your life be better? (Explore/open-ended question) Client – I could use the money, too – it adds up, you know?

Counselor – You've identified some reasons for quitting that are important to you. (Reflect) Client – Yes, I know. I guess I'd feel better.

Counselor – I hate to share this, but... it would be nice not to have this nagging cough. To be honest, I could use the money, too – it adds up, you know?

Counselor – You're right. Those barriers are important to you. Would you mind if I share some information about how smoking increases stress? (Ask Permission) Client – Smoking increases stress? It seems to be the only thing that makes me feel better.

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Meta-Analysis Finds Quitting Smoking More Effective Against Depression than Medication

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In conclusion

The researchers concluded that quitting smoking is associated with mental health benefits. Even more significant, they found that the effect sizes (measures of the magnitude or strength of the treatment) were equal or larger than those of antidepressant treatment for mood and anxiety disorders. Specifically, the researchers found that “Anxiety, depression, mixed anxiety and depression, and stress significantly decreased between baseline and follow up in quitters compared with continuing smokers.” Additionally, “Both psychological quality-of-life and positive affectivity scores significantly increased between baseline and follow up in quitters compared with continuing smokers.” For more information, you may view this study at www.bmj.com/content/348/bmj.g1151

G. Taylor, A. McNell, A. Gifings, A. Farley, N. Lindson-Hawley, P. Ayord. Smoking in mental health: a systematic review and meta-analysis. BMJ. 2014; 348 (feb13 1): g1151. DOI: 10.1136/bmj.g1151