### Patient with Major Depressive Disorder Avatar Script

People living with depressive disorders have a higher tobacco use prevalence as compared to the general population in the U.S. Recent research proposes that the high rates of tobacco use among people with depressive disorders may be related to the rewarding effects of tobacco on negative affective states, especially during nicotine withdrawal. It may be important to understand that people with depression who use tobacco may do so because they experience an increase in the anticipated worth of tobacco use in relation to affective and cognitive processes inherent in their condition.

For example, people with depressive disorders may use tobacco to help improve a low positive affect that is common with the disorder.

#### References

Mathew, A. R., Hogarth, L., Leventhal, A. M., Cook, J. W., & Hitsman, B. (2017). Cigarette smoking and depression comorbidity: a systematic review and proposed theoretical model. Addiction, 112(3), 401-412.

Weinberger, A. H., Kashan, R. S., Shpigel, D. M., Esan, H., Taha, F., Lee, C. J., ... & Goodwin, R. D. (2017). Depression and cigarette smoking behavior: a critical review of population-based studies. *The American journal of drug and alcohol abuse*, *43*(4), 416-431.

In addition, tobacco may be used to improve a high negative affective state which is another symptom quite characteristic of depressive disorders.

Moreover, people who live with depressive disorders may have challenges with cognition and attention. Those with depressive disorders who use tobacco often say that it improves attention and cognition.

These reasons that may increase tobacco use by people with depressive disorders can be particularly challenging when they attempt to stop tobacco use. For example, it is important to anticipate and monitor increased depressive moods and pronounced withdrawal symptoms when they are stopping tobacco use. The selection of treatment approaches and tobacco cessation

medications must incorporate the unique challenges experienced by those with depressive disorders in cessation.

#### References

Secades-Villa, R., González-Roz, A., García-Pérez, Á., & Becoña, E. (2017). Psychological, pharmacological, and combined smoking cessation interventions for smokers with current depression: A systematic review and meta-analysis. *PloS one*, *12*(12), e0188849.

For more information on evidence-based tobacco treatment approaches for individuals with depressive disorders and other mental illnesses, please see the link available below:

www.samhas.gov

<u>Current issues:</u> 22-year-old Caucasian female, currently receiving outpatient treatment for Major Depressive Disorder. She was referred to her advanced practice care provider at a community mental health center because her family was concerned that she was increasingly despondent and verbalizing thoughts of harming herself. She has been restarted on new medications and referred to an eight-week cognitive behavioral therapy program. She is attending a two-week follow-up visit at the community mental health center.

<u>Psychiatric history:</u> New antidepressant medications are effective with minimal and manageable side effects. She still has little pleasure and motivation with intrusive negative thoughts for the past year. Sees psychiatric practitioner at the local community mental health center. Attends a group-based cognitive behavioral therapy program.

<u>Social:</u> Lives with family in a suburban neighborhood. She is employed part-time at a pet grooming clinic and is attending school full-time in graduate school. Has few friends and spends most of her time at home when not at work or in school. Denies the use of recreational drugs or alcohol.

**Medical history:** Childhood asthma, controlled with bronchodilator medications.

### **Tobacco use history:**

The patient's Fagerstrom Test for Cigarette Dependence score was a 4, placing her in the low to moderate dependence category. She consumed approximately 1/2 packs (10 cigarettes) per day and smokes cigarettes within 30 minutes upon awakening, more frequently in the mornings, and typically after meals. She started smoking 7 years ago when her friends offered her a cigarette after school. She has never tried to stop smoking but has noticed herself getting short of breath more often when trying to exercise.

She believes that stopping smoking would help her overall health and would like to make a change at this time. Her father and brother also smoke cigarettes but her mother is supportive of her quitting.

Narrator: As a review, the steps in the 5 A's are:

- ASK about tobacco use
- ADVISE to stop use
- ASSESS readiness to stop use
- ASSIST to stop use
- ARRANGE for follow-up and support

#### Scenario

**ADVANCED PRACTICE PROVIDER**: Thanks for agreeing to meet with me today. Your Social Worker mentioned that you are interested in stopping your tobacco use. What would you like for us to accomplish in our time together today?

**Patient:** I need to stop smoking so that I can focus on getting better. I just want to get better as a whole. At our last group session, we talked about nutrition and exercise, and wellness. I don't think my smoking helps me with my wellness.

**Advanced Practice Provider:** It sounds like you want to stop tobacco use so that you can achieve wellness and you are meeting with me today to discuss how to stop?

**Patient**: Yes, my Social Worker said that you are an expert in helping people who want to stop smoking.

**Advanced Practice Provider:** Well, I'm glad that you came today and I hope that we can work together towards a plan to see how best you can achieve your goal. May I begin by asking you a few questions about your current tobacco use?

Patient: Okay.

Advanced Practice Provider: What types of tobacco products do you currently use?

[ASK]

**Patient:** Uh... I mostly just smoke Camel lights...like half a pack a day...I usually smoke maybe 3 or 4 in the morning...like to help me get up and with my coffee...then I smoke like 2 cigarettes after I eat...and usually 1 or 2 right before bedtime...that's kind of my routine...

**Advanced Practice Provider:** So, you usually smoke about ten Camel lights a day, mostly in the morning but also after meals and right before bedtime?

Patient:: Yeah...that's about it.

**Advanced Practice Provider:** Do you use any other tobacco products like chew tobacco or pipes or cigars... electronic cigarettes or vapes?

**Patient** Uh...I just started trying vapes a few weeks ago...I thought they might help me quit or something, but I haven't tried quitting...I guess it was more for like the experience...you know...so many people are doing it now, I thought it might be better than cigarettes....

Advanced Practice Provider: When last did you try vaping?

**Patient:** Maybe a few days ago...yeah...it was on Monday...I vaped instead of smoking cigarettes after lunch like I usually do...

Advanced Practice Provider: Thank you for clarifying. How did that work out for you?

**Patient**: I guess it was alright...I read on the internet that vapes can help decrease your appetite...which is what I use cigarettes to do mostly anyways...I guess it worked the same as my cigarettes....and it didn't make me feel as short of breath as when I smoke cigarettes...

Advanced Practice Provider: That's interesting to me because in my work I've learned that people use tobacco products for many different reasons...some to deal with stress, some because they're bored, some to help with weight loss...but most usually because they are addicted. So, what are some of the things you find good about smoking cigarettes?

**Patient** Gosh...I guess I mostly like the hit I get from smoking a cigarette...especially in the morning with my coffee...I feel like my mind clears up a bit and I get some kind of motivation

to do something. I'm not sure how I'd get out of bed and go do things without my cigarettes and coffee in the morning.

**Advanced Practice Provider:** I can certainly understand needing that little something to get you going in the morning since I also drink coffee....Is there anything else that you like about smoking?

**Patient:** Well.. as I said earlier, it helps me not to want to eat too much...so I can use it to control my appetite and my weight...sometimes it helps me with the bad thoughts too...

**Advanced Practice Provider:** With the bad thoughts? Could you tell me more?

**Patient**: It's like...sometimes I start getting these bad thoughts about things and I feel like I get stuck in those thoughts...when I smoke a cigarette, I can just enjoy the taste...and sometimes I can forget about the bad thoughts...especially when the bad thoughts just get *really* bad...I smoke a few more cigarettes, and then, I guess I feel a little better...

**Advanced Practice Provider:** So, it sounds like smoking helps with getting you up in the mornings, clears your mind up a bit, gives you some kind of motivation to do things as well as control your appetite, and it can really help you deal with bad thoughts...

**Patient**: Yeah...I haven't really thought about it that way but it seems like I use it mostly to help with the way I feel sometimes...

**Advanced Practice Provider:** Can you explain what you mean by it helps you with the way you feel?

**Patient:** Well, I was told that I have major depression and they gave me some medicine for it. I always thought that I just smoked because it helped me do things, but now I'm thinking maybe my smoking is because of my depression...I don't know...what do you think?

Advanced Practice Provider: The reasons why people use tobacco products vary quite a bit. However, much research suggests that there *is* a stronger association between smoking and depression. The research suggests that some things in tobacco products may help to alleviate some depressive symptoms. For example, some of the things you mentioned like increasing motivation, reducing negative feelings, and increasing concentration can be attributed mostly to the effects of nicotine from cigarettes. However, research also tells us that cigarettes contain over 7000 chemicals of which more than 40 are linked to cancer and other diseases. So on the one hand tobacco products are often used by people with depression to feel better, but because of the

constituents in tobacco products that can cause illness and disease, people with depression are also more vulnerable to tobacco-causing diseases.

**Patient**: Wow...I didn't know that....I mean, everyone knows that cigarettes are kind of bad for you, but I didn't know that a cigarette has 7000 chemicals...that's a lot of chemicals....

Advanced Practice Provider: It is a lot, but the function of many of those chemicals is simply to get nicotine to the brain so that a person can be addicted...and that is why I spend the time to help treat people who have an addiction to tobacco so that they won't get sick from all those chemicals.

**Patient**: Do you think I'm going to get sick from all the cigarettes I've been smoking? **Advanced Practice Provider:** Well, tell me what are some of the things that aren't so good about smoking for you?

**Patient**: ..uh...whenever I exercise, I get a bit short of breath...I don't know if it's my smoking or not...but it worries me sometimes.

**Advanced Practice Provider:** So, you believe that your smoking may be affecting your breathing when you exercise. Is there anything else that's not so good about it?

**Patient**: ...well, you just told me that I'm getting lots of chemicals in my body every time I smoke and that I can get addicted.

**Advanced Practice Provider:** Smoking is indeed quite addictive for many people. Have you ever felt addicted to your cigarettes?

**Patient**: I'm not sure...how do I know if I'm addicted?

Advanced Practice Provider: When people don't smoke for a while, either deliberately when they are trying to quit, or maybe they go for a prolonged time without cigarettes, they tend to experience a few symptoms such as depressed mood, irritability, poor concentration, nervousness and restlessness, changes in appetite, strong cravings to smoke. Have you ever experienced any of these symptoms?

**Patient**: Yeah...sometimes when I'm late for work and I had to get to work without smoking in the morning, I felt quite irritable and nervous and restless. I knew if I could just get a cigarette I'd feel better...I guess I am a bit addicted?

**Advanced Practice Provider:** So, it sounds like, on the one hand, you like smoking because it helps with getting you motivated in the morning, it's a way you can control your appetite, and it helps when you have some of the bad feelings. However, on the other hand, smoking is affecting

your breathing when you exercise, putting you at risk for tobacco-related illnesses because of all the chemicals getting into your body, and causing you to be addicted. Does this sound about right?

Patient: Yeah...that about sums it up.

**Advanced Practice Provider:** Is it ok if I share some more information about how smoking may affect your health?

Patient: Sure

Advanced Practice Provider: Based on the questionnaire you filled out earlier, your cigarette dependence score was a 4, which means that you have a low to moderate dependence on cigarettes. I'm concerned about how smoking affects your breathing during exercise, especially with your goal to achieve wellness. Also, for people who have depression, although cigarettes may initially appear to relieve some of the symptoms of depression, the tar and other chemicals from the cigarettes can decrease the effectiveness of your medications and can make your symptoms worse, especially when you are in a situation of nicotine withdrawal. So, the best advice I can give you as your healthcare provider is that you stop smoking.

# [ADVISE]

I believe that stopping smoking will improve your overall health and help you achieve your goal of well-being. What do you think about that?

Patient: Could you explain what a low to moderate dependence on cigarettes means?

Advanced Practice Provider: Absolutely! It means that on a scale of zero to ten, with zero not being at all addicted and ten being completely addicted. You scored a four. Those who score a 6 or greater have a harder time when they try to stop tobacco use, especially having a hard time with nicotine withdrawal. With a low to moderate dependence, we may anticipate that you would have a harder time stopping smoking as compared to someone with lower dependence. However, your score helps me to know what types of approaches we can explore if you are interested in stopping smoking. Are you interested in discussing ways to stop?

**Patient**: Yes, I am, that's why I came and the information you've given me so far about the harmful things in cigarettes and my dependence level makes me want to quit even more...

Advanced Practice Provider: Well, have you ever tried to stop smoking before?

**Patient**: No...not really...

**Advanced Practice Provider:** So, on a scale of zero being not at all important and ten being very important, how important is it for you to stop smoking at this time? Where would you place yourself on the scale?

### [ASSESS]

Patient: A ten.

**Advanced Practice Provider:** It seems that stopping smoking is really important to you. Can you tell me why you chose a ten and not a lower number?

**Patient**: I really want to get better overall. I'm ready to make a change in my life and I think stopping smoking would be good for me

Advanced Practice Provider: How about your confidence in stopping smoking? On the zero to ten scale, how confident are you that you can stop smoking? Zero would be not at all confident, and ten would be extremely confident.

Patient: I'd say a seven...

**Advanced Practice Provider:** Why a seven and not a five or six?

**Patient**: I'm quite motivated to quit...I'm definitely going to try...and I think I'm getting the help I need.

**Advanced Practice Provider:** What do you think would help move your confidence up from a seven to an eight or a nine?

**Patient**: Well, my dad and brother both also smoke...they don't smoke that much but it's kind of something we all do together at night before going to bed. My mom hates it...so she'll be glad that I want to quit...but I'd miss spending that time with my dad and especially my brother....

Advanced Practice Provider: So, it's really important for you to stop smoking and you are confident that you can quit with help, but it's going to be hard not to be able to smoke with your father and brother after you quit.

Patient: Yeah...

**Advanced Practice Provider:** Well, how ready are you to make a change right now in your smoking? Zero would be not at all ready and 10 would be extremely ready.

Patient: Well, I think I can begin soon... Maybe in a week or so?

**Advanced Practice Provider:** Well how ready would you stop smoking on a scale of zero to ten?

Patient: ... An eight.

Advanced Practice Provider: So, why an 8 and not a nine or ten?

Patient: I mean...I'm ready to start...but I don't think I can do it right away....you know?

Advanced Practice Provider: Ok so it sounds like you are willing to start but you'd like some

tools and maybe a plan to help?

Patient: Yeah...that's it...I need a plan...

**Advanced Practice Provider:** Well, can we go ahead and discuss a possible plan to help you stop smoking?

## [ASSIST]

Patient: Yes...that would be great!

Advanced Practice Provider: I want to first congratulate you on your decision to stop smoking. I believe doing so would help you achieve your goal of health and well-being. One of the greater challenges in stopping tobacco use is changing your normal pattern of behavior that is associated with your tobacco use. So, you will need to have a good idea of when you usually smoke, how many cigarettes you smoke, and what you are doing when you are smoking. Often a good way of doing this is to keep a smoking diary. Some people find it beneficial to record their smoking behavior for a week just to get a good handle on it. What do you think about that?

**Patient**: I don't know... I'm pretty regulated in my smoking behavior... as I mentioned....it's pretty much about 10 cigarettes a day with about 4 in the morning and the others after meals and right before bedtime. I've been doing this for a few years now...I only ever smoke more if I am a bit stressed or have bad thoughts...

**Advanced Practice Provider:** I see that you do have a pretty good handle on when and how you smoke. Another option might be trying a smoking holiday?

**Patient:** What is that?

**Advanced Practice Provider:** A smoking holiday is when you try to not smoke for a period of time and see how you respond to that trial. For example, you may consider skipping smoking in the morning after waking up and trying to consider something else to do instead of your normal smoking routine. What do you think about that?

**Patient:** I'd like to try that....maybe I can try to skip smoking in the morning and instead vape when I would normally smoke a cigarette.

**Advanced Practice Provider:** That sounds like a possible plan. I'm curious, may I know why you are considering vaping instead of using smoking cessation medications?

**Patient:** Well, I read on the internet that vaping can help with cravings and stuff and it is just vapor with some nicotine. You said that cigarettes have thousands of chemicals but vapes don't have them right?

Advanced Practice Provider: To be honest, the problem with vapes is that because they are not yet regulated, we are never certain exactly what chemicals you will be getting from each product. So, we are never certain how to advise people about vapes. The current research on vapers and other electronic cigarette-like products is not yet clear. In some cases, they have some of the same harmful chemicals that we find in cigarettes, but at a lower amount. Again, because the Food and Drug Administration has not fully regulated these products, different manufacturers can put all kinds of things in the e-liquids and juices. So, as a health care provider, I cannot fully support their use. On the other hand, we have seven different smoking cessation products that have been approved by the Food and Drug Administration that we know, from research, will increase your chances of quitting. Can I tell you more about them?

**Patient:** Do you mean like the patch and stuff?

**Advanced Practice Provider:** Yes, there're the nicotine replacement products like the patch, the gum, the lozenge, and the nasal spray or Inhaler. There is also the option of some medications like varenicline and bupropion.

[At this point on the screen we should show a slide of the nicotine replacement products like the gum, patch, lozenge, etc, and pill boxes that would represent varenicline and bupropion]

Patient: How would I use them?

Advanced Practice Provider: Each product and medication has its own benefits depending on your goal of quitting. The nicotine replacement products work by replacing the nicotine you would normally get from a cigarette through a patch or the gum or lozenge. The patch comes in different doses that we would recommend based on how much you typically smoke a day. For example, since you smoke about 10 cigarettes a day, I would probably recommend a fourteen-milligram patch that you would put on daily. This will give you a steady dose of nicotine throughout the day. However, in addition, I would probably recommend some gum that you could use in case you have cravings. So, perhaps you could chew a piece of gum after every meal just as you normally did with a cigarette. What do you think about that?

**Patient:** That sounds like a good plan. What about the medications...did you say varenicline and bupropion?

Advanced Practice Provider: Yes, Varenicline is often known as Chantix, and bupropion is often called Zyban or Wellbutrin. Before recommending varenicline, I need to know if you have ever had any kidney problems or kidney disease.

Patient: No, I haven't.

Advanced Practice Provider: What about ever having a seizure disorder or alcohol

dependence?

Patient: No, I haven't either.

Advanced Practice Provider: Ok. That's good. That means that either varenicline or bupropion can be a good choice for you. If I was to recommend medication, I would recommend Varenicline because it has the best outcomes in studies helping people quit smoking. However, I believe with your low to moderate dependence score, you may consider trying a patch with gum first if you are willing. It is also a much more cost-effective option than varenicline.

**Patient:** Ok. I'd like to try the patch and gum option first. How should I use them?

**Advanced Practice Provider:** Here's some information on how to use the nicotine patch. To use the patch, make sure that you place one on the skin of either your upper back or arms after you have cleaned and dried the area. If the patch is falling off, you may need to use some none allergenic tape to hold it in place. As I mentioned, because you smoke about 10 cigarettes per day and have a low to moderate level of dependence, you should probably try a fourteenmilligram patch once daily for six weeks and then a seven-milligram patch once daily for two weeks.

Patient: Ok.

**Advanced Practice Provider:** As for the gum, here is some information on how to use it. I would recommend a two-milligram piece that can be used once every thirty minutes so that you can use about one to two pieces every hour if needed. To use the gum, you will need to chew it slowly until you feel a tingle and then park it between your gum and teeth until the tingling goes away. Then chew it again slowly until you feel the tingling and park it again. Repeat this process until you no longer feel the tingling. Then you can discard that piece of gum.

Advanced Practice Provider: Do you have any other questions about using nicotine replacement products?

**Patient:** No, this is great, I'd like to give it a try.

**Advanced Practice Provider:** Now, I remember that you mentioned that you often smoke with your father and brother. Have you given any thought to how stopping smoking may affect your time with them? Do they usually smoke inside the house?

Patient: Yeah...usually after dinner we'd either smoke outdoors, on the back patio or at the kitchen table with the windows open if it's cold outside...like in the winter...or if it's raining.

Advanced Practice Provider: What do you think you could do to avoid being exposed to their smoking?

**Patient:** I guess I'll need to find a way not to smoke with them at that time. Maybe do some other activity with my mom... I'm not sure...

**Advanced Practice Provider:** I think it is a good idea to obtain your mother's support in your quitting. I am glad to hear that you have such a supportive family.

**Patient:** Yes, my parents have always been supportive of me. I'm sure we will all figure something out.

**Advanced Practice Provider:** That's great! So, it seems that as a plan you will try to use the patch and the gum while quitting and you'll talk with your family about your plan to quit. When would you like to quit smoking, do you have a particular date in mind?

**Patient:** Yeah...I think I'd like to start beginning next week. I'd like to probably try the smoking holiday on Saturday and then start using the patch on Sunday.

**Advanced Practice Provider:** That sounds like a plan! Is there anything else about ways to quit that you would like to ask?

**Patient:** No...thank you for talking with me about it....

**Advanced Practice Provider:** You are welcome. Can I set a time for us to meet again to discuss your quitting and how things are going, let's say in about two weeks?

# [ARRANGE]

Patient: Sure....that would be great...usually, Tuesdays around this time are best for me.

**Advanced Practice Provider:** That time will work perfectly. I will set you up for an appointment for Tuesday two weeks from now.

**Patient:** Thank you.