

Introduction

Damien Jackson is a hypothetical 33 year old male who is a former truck driver. He recently got a job at an UPS processing center and expects to be more active. He is adopted and does not know his birth parents. He has a history of hypertension and gout. He has been taking medications for these conditions, albeit inconsistently. He has been getting refills at urgent cares. Mr. Jackson has not visited a primary doctor since the age of 18. This office visit takes place in November.

Medications (taken inconsistently)
hydrochlorothiazide 25 mg daily, diltiazem 120mg daily, allopurinol 100 mg daily

Vitals

BP 140/88 P 72 R 18 T 98.6
Height 5 ft 10 in Weight 200 lbs
Waist circumference: 43 in

His calculated BMI is 28.7, which is considered overweight.

Immunizations

Mr. Jackson was under his parent's insurance up to the age of 18. He has had regular health visits up to that point. We can assume that he has had all his childhood vaccinations. I would ask him to bring his childhood health records to ascertain that this is a correct assumption.

At this time he needs an influenza vaccine. Since it has been 15 years since he saw a doctor, we can safely assume that he has not had a TD booster. Since he lives with his girlfriend and their 4 year old son, he might have had the TDAP vaccine 4 years ago. If

this is not the case, then he would also need a TDAP in addition to the flu vaccine. MMRV titers should also be taken in order to determine if he needs a MMRV booster.

Screening

According to the USPSTF the patient should have the following screens:

- Alcohol misuse
- Hypertension
- Depression
- Obesity
- HIV
- Tobacco use and cessation

Health Promotion/Disease Prevention Concern*Injury Prevention*

- Wearing a seatbelt
- Drinking and driving
- Fall prevention
- Proper lifting and back injury prevention

Diet

Mr. Jackson has gout and hypertension (HTN). He needs to follow a diet that takes these conditions into account. Research indicates that the DASH diet is beneficial for those with HTN and gout. This diet supports the intake of vegetables, fruits, and low levels of dairy. It also supports intake of moderate amounts of whole grain, fish, poultry and nuts. He needs to limit his sodium intake to less than 2,300 mg a day. He needs to avoid foods high in saturated fat, trans-fat, and total fat. He should be sure to avoid high sodium items such as low-fat soups, canned products, cereals, and sliced deli meat.

As for regulating his gout, he should be given the following advice: He needs to avoid

glandular meats such as liver, kidney and sweetbreads; He also needs to avoid seafood such as anchovies, shellfish, sardines, and tuna. Glandular meats and seafood have high purine levels which increase the level of uric acid and exaggerates gout. Likewise the amount of red meat (beef, lamb, and pork), sugary foods/beverages, and the consumption of alcohol needs to be limited. This provides a possible reason why Mr. Jackson experienced his last gout attack after a lobster dinner with red wine.

Research shows that moderate amounts of seafood can be beneficial for those with gout. In addition, vegetables that are high in purines, such as asparagus and spinach, have no significant correlation with an increase in gout attacks. Cherries have been shown to reduce gout attacks. Fruits that are rich in vitamin C can lower uric acid levels with the condition that these fruits also should be low in sugar content.

As per his current diet, Mr Jackson should be encouraged to slowly stop eating pastries and cakes. He could begin by slowly substituting these with healthier but also sweet snacks such as cherries. He should also attempt to cut

back on the amount of full fat milk he drinks in a a day. He should slowly substitute it with skim milk. The table on bottom of page 2 provides an example of a diet plan that Mr. Jackson could follow.

Exercise

Mr. Jackson is overweight and his waist circumference is above 40 inches. He has an increased risk for CVD. Due to this and his history of hypertension he would benefit from an appropriate exercise plan.

At the age of 33 Mr. Jackson tries to stay active through his church community and by playing basketball. However he does get tired easily after exerting little effort, particularly after carrying groceries up the stairs. I would recommend he start by improving his endurance when walking up the stairs. He can start by walking up and down the stairs of his apartment 4-5 times a day. I would also encourage him to join local basketball pick up games during his time off. He could also try to stay active by teaching his 4 year old son how to play basketball and/or other sports. According to the CDC “a person who does 300 minutes [of movement] a week has an

Recommended Diet Table

Breakfast	Lunch	Dinner	Snacks	Drinks
A smoothie made from one vitamin C rich fruit such as Papaya/Pineapple/ Strawberries/ raspberries/ blueberries/ cranberries/ + oatmeal + banana	Salad of grilled chicken, collard greens, broccoli, carrots, tomatoes	Chicken/salmon/ tofu, brown/ basmati rice, kidney beans/peas, kale, and broccoli/ carrots	Cherries	Coffee
-or- Whole grain bread and almond butter			Low fat yogurt	Skim Milk
			Unsalted Edamame	Water
			Unsalted nuts	

even lower risk of heart disease or type 2 diabetes than a person who does 150 minutes a week” (CDC). If Mr. Jackson follows the above recommendations he can easily meet this minimum.

Mr. Jackson has no severe pulmonary issues and states that he interested in getting more exercise. I would recommend that he obtain a gym membership and follow the exercise plan in the table on page 3.

Harm Reduction

I would introduce nicotine replacement therapy as a way to mitigate his use of cigars.

Brief Intervention

Obesity

As indicated above, Mr. Jackson carries increased risk for CVD due to his history of

HTN, his BMI, and his waist circumference. It is important for him to mitigate his risk for CVD since it is the leading cause of death in the United States with 20,000 deaths per year. Dietary and exercise changes are imperative. In order to briefly intervene, I would begin by using the modified five As. First I would “ask”, this involves an open ended question in a motivational interviewing style in order to ease the patient into talking about their weight and its relation to their health. This is also meant to gauge the patient’s willingness to want to change and their readiness to discuss the topic. Since Mr. Jackson is interred in losing weight, I would move onto “assess”. This involves ascertaining the psychosocial factors contributing to his weight, and the other factors (mental health, mechanical, metabolic, and monetary factors) that

Recommended Exercise Table

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Rest day -or- Play sports with son	5 minute warm up walk on treadmill 10 minutes on Stairmaster Run for 20 minutes while alternating 5 minutes on easy and 5 minutes of moderate intensity 5 minute cool down walk	Rest day	5 minute warm up run on treadmill Leg press, one set to failure Lying leg curls, one set to failure Wide grip lat pull down, one set to failure Dumbbell bicep curls and tricep pull downs, one set each to failure	5 minute warm up walk on treadmill 10 minutes on Stairmaster Run for 20 minutes while alternating 5 minutes on easy and 5 minutes of moderate intensity 5 minute cool down walk	Rest day	Basketball Pick up game

contribute to his weight. From here I would offer “advice” to Mr. Jackson on ways to lose weight through diet and exercise. Then Mr. Jackson would have to explicitly “agree” to this diet and exercise plan. He would negotiate to focus on what is meaningful and achievable for him. Finally I would “assist” Mr. Jackson by helping him recognize potential barriers to his goal. We would discuss ways to address these potential barriers. I would also set a follow up appointment for Mr. Jackson in one week. I would make myself or another member of the staff available to reach out to Mr. Jackson every 2 weeks to insure that he is following the treatment plan and to offer any further assistance that is requested. The diagram below summarizes the 5 As.

Ask

“Are you concerned about your weight or any possible effects it might have on your health?”

Assess

His BMI is 28.7 which is considered overweight. His waist circumference is 43 inches. He has a history of HTN.

Advice

Diet and Exercise treatment plan as indicated on tables on pages 2 and 3.

Agree

Mr. Jackson agrees to treatment plan since it aligns with health goals.

Assist

Follow up in one week with biweekly interventionist meetings.

Smoking Cessation

I would also conduct a brief intervention regarding Mr. Jackson’s smoking especially

with his history of hypertension. Research indicates that smokers lose an average of 14 years of their life. In New York City, a third of all smokers lose their life before the age of 65. In addition, decreasing tobacco usage and eventually quitting will have an extensive benefit for Mr. Jackson. It would mitigate his risk for having a heart attack by 50% after the first year of quitting.

Mr. Jackson smokes about 4 cigars a week to relax. According to the CDC one large cigar is roughly equivalent to the amount of nicotine and tobacco in an entire pack of cigarettes. Therefore his suspected Heavy Smoking Index is at least 3.

I would begin by advising Mr. Jackson to quit. I would say “As your physician assistant I care deeply about your health and well being. I would like to help you quit smoking cigars because this is the best thing you can do to improve your health”. From here I would assess his readiness to quit using the OARS of motivational interviewing. This involves the use of open ended questions, statements that affirm positive aspects, and statements that appropriately respond to what the patient is telling you. Through the OARS motivational interviewing technique I would hope to decrease Mr. Jackson’s tobacco usage and eventually help him quit. It is important to set an agreed upon quit date. The diagram below summarizes the questions/statements that would be posed/made during this intervention.

Open ended Question

“Are you concerned about the effects that cigar smoking might have on your health?”

Affirmations

It is fantastic that your resolve to quit smoking is really strong.

Reflections

I can see how it would be difficult to quit smoking when all your friends smoke cigars with you to relax and you want what's best for your health.

Summarization

Cigar smoking has a negative effect and puts you at risk for a heart attack. I can see your resolve to quit smoking is important to you. You notice that it would be difficult to quit immediately since you use cigars to relax. You're wondering if there are any ways to decrease your dependence and eventually quit.

In addition to counseling I would offer Mr. Jackson pharmacotherapy in the form of nicotine replacement therapy (NRT) and if necessary bupropion. I would start with NRT and advise use of bupropion if requested.

Order of items/Issues to address

1. Substance Use- Smoking
2. Diet/Exercise
3. Screening
4. Immunizations
5. Injury Prevention

General Research

1. Adult Preventive Health Care Schedule: Recommendations from the USPSTF
2. Recommended Adult Immunization Schedule – United States – 2016
3. Health Promotion & Disease Prevention: Setting the Agenda PowerPoint

Diet Research

1. Stephen P. Juraschek, Allan C. Gelber, Hyon K. Choi, Lawrence J. Appel, Edgar R. Miller. Effects of the Dietary Approaches To Stop Hypertension (DASH) Diet and Sodium Intake on Serum Uric Acid. *Arthritis & Rheumatology*, 2016; DOI: 10.1002/art.39813
2. Modified 5 As Minimal intervention for obesity counseling in primary care by Michael Vallis, Helena Piccinini-Vallis, Arya M. Sharma, Yoni Freedhoff
3. The New York City Department of Health and Mental Hygiene No. 7; 54-60 Helping patients make healthy eating choices pdf
4. <https://www.mayoclinic.org/healthy-lifestyle/nutrition-and-healthy-eating/in-depth/dash-diet/art-20048456>
5. <https://www.mayoclinic.org/diseases-conditions/high-blood-pressure/in-depth/high-blood-pressure/art-20046974>
6. <https://medlineplus.gov/ency/article/002404.htm>
7. <https://www.mayoclinic.org/healthy-lifestyle/nutrition-and-healthy-eating/in-depth/gout-diet/art-20048524>

8. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6535740/>

Exercise Research

1. https://health.gov/paguidelines/second-edition/pdf/Physical_Activity_Guidelines_2nd_edition.pdf#page=55
2. Lifestyle Modification for Obesity : New Developments in Diet, Physical Activity, and Behavior Therapy by Thomas A. Wadden, Victoria L. Webb, Caroline H. Moran and Brooke A. Bailer
3. Writing an Exercise Prescription PowerPoint

Intervention

1. betobaccofree.gov
2. Tobacco is Tobacco. No Matter the Type pdf
3. CHI treating tobacco addiction pdf
4. What to Tell Your Patients About Smoking: A Report of the Surgeon General: How Tobacco Smoke Causes Disease by CDC
5. The New York City Department of Health and Mental Hygiene No. 7; 54-60 Helping patients make healthy eating choices pdf
6. https://www.cdc.gov/tobacco/data_statistics/fact_sheets/tobacco_industry/cigars/index.htm