

Alexandria's Case

Planning Notes:

- 1) **Teams:** 4-6 students (instructor or student-selected)
- 2) **Length:** 2 class periods
- 3) **Resources:** Student workbook; Computers/Internet for research, if available

OVERVIEW:

Alexandria is a teenager who used to always be happy and content with life. But lately she has been feeling differently. When she goes into the clinic for a routine physical, will you, as her physician correctly determine whether she is struggling with a substance abuse problem? If so, will you help her get onto a path to recovery?

GOAL:

Gather subjective and objective information, determine the meaning of objective data, and use the data as evidence to form a logical conclusion.

ROLE:

Each team member will work together collectively in the role of Alexandria's family physician.

OBJECTIVE:

Obj. 3.10: Determine an evidence-based assessment and an aligned treatment plan

DELIVERABLE:

- 1) SOAP Note
- 2) Informal presentation

ASSESSMENT:

Two of the SOAP note sections (Assessment and Plan) will be evaluated on a rubric.



Role:

Alternatively, the students' role could be modified to be a social worker or a mental health care practitioner. Social workers would not use the SOAP note template in the same way, however, so slight modifications would need to be made.

You are a general practitioner, and you see 10-12 patients everyday for a variety of reasons. You work in a clinic with a team of other doctors. Today, you are examining a 17-year old female, Alexandria, for her high school physical. Though she is a patient of yours, it has been 3 years since you've last seen her. Upon her last visit, she was a healthy, active 14-year old of normal height and weight.

Case Introduction:**PATIENT INTERVIEW AND EXAM:**

Select a student to act out the doctor and Alexandria's parts for the whole class, or have each group assign their own roles.

Upon entering the exam room, you notice that Alexandria's posture is poor and her shoulders are slumped. Her face is pale and she has dark circles under her eyes. Her clothes seem a little baggy. You have the following conversation with Alexandria:

Doctor (D): How are things going, Alexandria?

Alexandria (A): They're fine.

D: How's school? Keeping your grades up?

A: It's okay, I have mostly Cs.

D: You used to have all As and Bs, what's happening in your junior year?

A: Just getting tougher, I guess.

D: How are your friends?

A: They're good, I've been hanging out with kids who don't go to my school lately.

D: How often do you get to see them? It must be hard not being at the same school.

A: I see them everyday.

D: How is that?

A: Well, sometimes, I think it's more important to hang out with my friends than to go to school.

D: So you're skipping school?

A: Sometimes.

D: How are your parents?

A: Still drinking.

D: How do you feel physically?

A: Fine.

D: Are you sleeping regularly?

A: I'm not tired.

D: When was the last time you slept for a full 8 hours?

A: I don't know. Maybe a few weeks ago.

D: About how many hours of sleep per night are you getting?

A: Maybe 3 or 4. Sometimes I have visions that keep me up at night.

D: Are you eating regularly?

A: I'm not hungry.

D: When was the last time you ate? What did you eat?

A: I think I ate an apple yesterday or something.

D: Are you taking any medications?

A: Sometimes I take ibuprofen because my arms hurt, and some sinus medicine everyday.

D: How would you describe the pain in your arms?

A: They sometimes tingle; they're sometimes numb.

D: Why are you taking sinus medication?

Ask students: "What seems realistic or unrealistic about this dialogue between the physician and patient? What did the doctor do well and what could he/she improve upon in terms of patient communication skills."

A: I've been having lots of nosebleeds lately, they're pretty painful.

D: How would you describe your moods?

A: Well, sometimes I feel like I can do it all. I feel better than everyone, like a rock star. Sometimes I just feel like I don't even matter, like I should just end it all.

D: End what all?

A: Ya know. All of it.

D: Is there anything that makes you feel better when you want to "end it all?"

A: Some stuff. Being around friends who are into the same things I am.

D: Do you think it's healthy to think about hurting yourself?

A: You all are out to get me! I'm perfectly fine! Everyone wants me to go away, you all are planning to get rid of me, I know it!

Ask students: "What would the doctor do at this point?"

After interviewing Alexandria, you performed your physical examination. You found her to be 105 lbs and 65 inches. She has a blood pressure of 140/95, and a pulse of 120 beats per minute. Alexandria's body temperature was 101 degrees Fahrenheit, and she was sweaty even though the room was cool. Her pupils were dilated. During your exam, Alexandria seemed restless and fidgety. Her inner elbows had scabs that looked to be healing within the past month. Also, you have ordered substance tests of Alexandria's blood and urine. Although the lab tests won't return for another few days, you highly suspect a substance abuse or addiction issue.

Students can ask additional questions, if time permits. As long as answers are aligned with her substance abuse issue (cocaine abuse), the details can be flexible.

SOAP Note:

Complete the Subjective and Objective portions of the SOAP note with Alexandria's information.

SOAP Note	
Subjective:	
Signs & Symptoms	Major symptom: Possible suicide ideations; Signs: Sweaty, dilated pupils, Pale face, slumped shoulders/poor posture, dark circles under eyes, clothing baggy, restless and fidgety
Allergies	
Medications	Ibuprofen (daily) for sore arms; sinus medicine
Past medical history	Social history: skipping school, no longer seems happy, grades have dropped from A/B's to C's, peer group consists of students from outside school; parents drink,
Last oral intake	Not eating regularly; apple (yesterday)
Events leading to injury or illness	Sleeping 3-4 hours per night, on average
Frequency	
Associated Symptoms	Inner elbow scabs (past month), "Visions" keep her up at night, loss of appetite, painful nosebleeds, fluctuating between manic and depressive states
Radiation	
Character	Arms sometimes tingle, or "go numb"
Onset	
Location	
Duration	
Exacerbating Factors	
Relieving Factors	Being around friends makes her feel less depressed/suicidal

Objective:	
Measurements	17 years old 105 lb; 65 inches
Vital Signs	BP: 140/95 Temp: 101 deg F Pulse: 120 bpm
Exam Results	All organ systems normal
Lab Results	Blood and urine substance tests (results pending)

Students can calculate BMI with her height and weight so they can determine whether she is underweight or normal.

Research:

Write your research questions below. Use your research to rule out differential different substances should could be using. Your final diagnosis will include the substance as well as her status with that particular drug on the spectrum of drug use, abuse, and addiction.

Hypothesized Drug	Owner/Source	Evidence & Information

Students should first use the PDF summary of drugs of abuse from Lesson 3.3. Then they should find an additional, more comprehensive source for their assigned drug online, if resources are available for this. can use notes from class or research this in more depth online.

Assessment:

Write a short summary of Alexandria's case, then complete a differential diagnosis including at least three possible drugs that she may be using. Make a final diagnosis of the drug Alexandria has been using and what part of the spectrum of drug use, abuse, and addiction she is on (listed below for reference). Support with evidence and reasoning.

Assessment:	
Summary	<p>Example: Alexandria, a 17-year old female, presents with possible suicide ideation and substance abuse (indicators: sweaty, dilated pupils, pallor, nosebleeds, inner elbow scabs, and nighttime hallucinations)</p>
Differential Diagnoses	<ol style="list-style-type: none"> 1. Alexandria may be using: 2. 1) Heroin 3. 2) Cocaine 4. 3) Methamphetamine 5. 4) Marijuana 6. 5) Prescription or over the counter drugs
Final Diagnosis	<p>Claim: Alexandria is using Cocaine at a level considered "Substance Abuse" on the drug use, abuse, and addiction spectrum.</p> <p>Evidence: (Any combinations of the signs and symptoms or associated symptoms from the SOAP note, along with her vitals and her past medical history can all support this conclusion, however to be certain the drug test results would be needed. Students can be informed at the VERY END of the case that her drug test results came back positive for cocaine.)</p> <p>Reasoning: Alexandria has recently experienced a change in mental state and general behavior. Her interaction with the doctor also seemed suspicious and the symptoms and signs that unraveled throughout the visit all supported the conclusion.</p>

Drug Use, Abuse, & Addiction Spectrum (see Lesson 3.9): 1) Drug experimentation; 2) Social use of drug; 3) Binge drinking; 4) Substance abuse; 5) Addiction or Chemical dependency

Plan:

Create a plan for Alexandria, using information you research about the treatment and management of her diagnosed illness or disorder. Be sure to reference the stage she is currently in on the Developmental Model and a realistic timeline prediction of how she might move through the phases.

Plan:	
<p style="text-align: center;">Steps of Plan</p> <p><i>(Consider mental, social and physical health; short- and long-term needs, and follow-up care required)</i></p>	<div style="border: 1px solid black; background-color: #e0e0e0; padding: 10px; margin: 10px auto; width: 80%;"> <p>A variety of possible treatment plans are acceptable as long as they meet the following criteria:</p> <ul style="list-style-type: none"> --Address mental, social and physical health --Are thorough and detailed (ex: not acceptable are simple answers such as, "send her to rehab") --Are appropriate for her age and situation </div>

Rubric:

You will be graded on the stated objective using the rubric below:

Obj. 3.10: Determine an evidence-based assessment and an aligned treatment plan

Needs Improvement	Emerging Mastery	Partial Mastery	Mastery
<p>Assessment: (1) Final diagnosis of substance Alexandria is using is NOT supported with evidence and no sources cited. (2) Status in the Drug Use, Abuse, & Addiction Spectrum is missing.</p>	<p>Assessment: (1) Final diagnosis of substance Alexandria is using is supported with at least 1 clear piece of supporting evidence OR 1 reliable source. (2) Status in the Drug Use, Abuse, & Addiction Spectrum is unclear and inaccurate.</p>	<p>Assessment: (1) Final diagnosis of substance Alexandria is using is supported with at least 2 clear pieces of supporting evidence and 1 reliable source. (2) Status in the Drug Use, Abuse, & Addiction Spectrum is clearly noted, but may not be accurate.</p>	<p>Assessment: (1) Final diagnosis of substance Alexandria is using is supported with at least 3 clear pieces of supporting evidence and 1 reliable source. (2) Status in the Drug Use, Abuse, & Addiction Spectrum is clearly and accurately noted.</p>
<p>Plan: (1) Plan is completely inappropriate or lacking in detail. (2) Stage in Developmental Model & possible timeline is missing.</p>	<p>Plan: (1) Plan is either inappropriate, unrealistic, or incomplete, and neglects patient's mental, social, or physical health. (2) Stage in Developmental Model & possible timeline is unclear and inaccurate.</p>	<p>Plan: (1) Plan is appropriate and realistic, taking into account patient's mental, social, and physical health. (2) Stage in Developmental Model & possible timeline is clearly noted, but may not be accurate</p>	<p>Plan: (1) Plan is comprehensive, appropriate, and realistic, taking into account patient's mental, social, and physical health. (2) Stage in Developmental Model & possible timeline is clearly and accurately noted.</p>

Post-Case Wrap-up Questions:

Module 2 Learning Objectives:
Obj. 3.1: Identify the risk factors for addiction and reasons people may try drugs.
Obj. 3.2: Identify barriers to behavior change.
Obj. 3.3: Identify commonly abused drugs by category, routes of administration, and effects.
Obj. 3.4: Analyze how public health policies and government regulations have influenced smoking
Obj. 3.5: Identify the effects of alcohol on the body in relation to blood alcohol concentration.
Obj. 3.7: Identify factors that contribute to the use of marijuana among teenagers
Obj. 3.8: Use data to provide evidence in an explanation of the prescription drug abuse problem
Obj. 3.9: Explain the spectrum of substance use, abuse, & addiction and the Developmental Model

ANSWER THE FOLLOWING QUESTIONS ON A SEPARATE SHEET OF PAPER.

Obj 3.1: List at least two reasons why Alexandria may have chosen to try drugs. List at least one risk factor for substance abuse that Alexandria had.

Obj 3.2: Imagine you are Alexandria's loved ones and you confront her about her substance abuse problem. Write out three possible short responses that Alexandria may have. Each response should demonstrate one of the three barriers to behavior change.

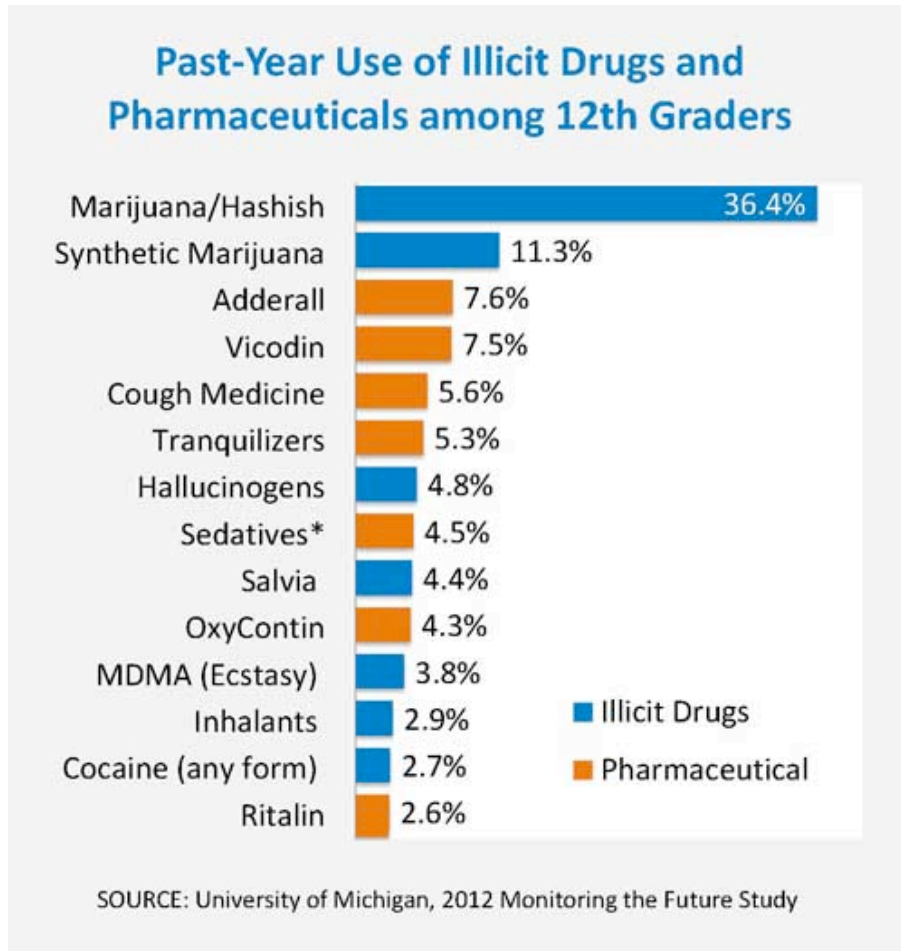
Obj 3.3: For the drug you diagnosed Alexandria as using, list the drug category it belongs in, it's possible routes of administration, and it's short and long-term effects.

Obj 3.4: Alexandria is not a cigarette smoker. However, if she had been a teenager 10-15 years ago, her statistical likelihood of being a smoker would be much greater. List at least two possible reasons why tobacco use has decreased among teenagers in the last 10 year. (At least one of the reasons should be related to public health policy or governmental regulation).

Obj 3.5: Alexandria is out at a party with her friends. She drinks five alcoholic beverages and gets into a car with a friend who has drank a similar amount. Why is this an extremely dangerous situation. List at least 3 specific reasons related to the effects of alcohol on the body.

Obj 3.7: List 3 factors that might influence Alexandria to try marijuana.

Obj 3.8: Based on the chart below, which pharmaceutical drugs have a higher past-year-use among 12th graders than the drug that you determined Alexandria was using.



Obj 3.9: Where did you place Alexandria on the spectrum of substance use, abuse and addiction? Why did you place her there? (Cite at least two pieces of evidence). Why might this often be difficult to determine?