



OVERVIEW

BIG IDEA

Gathering specific data from the patient helps lead to an accurate diagnosis.

OBJECTIVE

6.9: Obtain subjective information from a patient using the OPQRST mnemonic

AGENDA

1. Heart Attack Map
2. OPQRST Symptom Assessment
3. Heart Attack Reading
4. Role Play: OPQRST Interview

HOMEWORK

Create your own OPQRST interview using any acute illness. Write a script of the dialogue between the patient and healthcare provider.

LESSON 6.9

OPQRST Symptom Assessment

SUMMARY:

Students will engage in more focused learning to continue to their study of the SOAP note method, by examining the OPQRST mnemonic for acute symptom assessment. They will also learn about heart attacks, and how the OPQRST questioning elicits information to determine when a heart attack should be suspected. Through role plays, students will practice the art of questioning and learn to apply different scenarios to the process of gathering subjective information.

STANDARDS:

NHES 3.12.4: Determine when professional health services may be required.



OPQRST Symptom Assessment

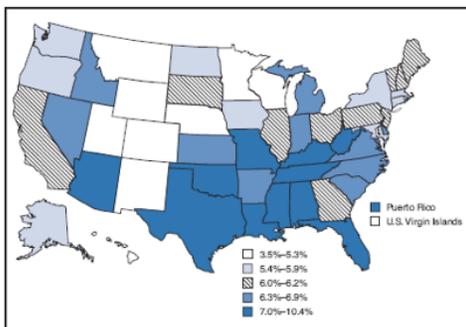
Obj. 5.9: Obtain subjective information from a patient using the OPQRST mnemonic



Heart Disease in the U.S.

Use the map below to answer questions 1-3.

FIGURE. Self-reported prevalence* of history of myocardial infarction or angina/coronary heart disease among adults aged ≥18 years — Behavioral Risk Factor Surveillance System, United States, 2005



* Age adjusted to the 2000 U.S. standard population of adults.

Note: Myocardial infarction = heart attack; angina = heart pain

1. What was the self-reported prevalence of history of heart attack or heart disease in your state?
2. What geographical trends do you notice in the prevalence of heart attack/heart disease?
3. What factors do you think may account for these trends?



Identifying Heart Attacks

Why do you think many heart attacks are difficult to predict and diagnose early?

DO NOW:

ANSWERS:

1. In Illinois: 6 – 6.2%
2. Higher rates of heart attack & heart disease in the Southern states; pockets of very low rates in middle states and Northern states
3. Answers will vary... Diet, physical activity, cultural habits for diet/activity may play a role

DISCUSS: Students can venture any logical guess; there are many possible reasons, including but not limited to: 1. heart attack symptoms can vary, sometimes be subtle, and often progress slowly over hours, days, and even weeks. 2. many people may be reluctant to call 9-1-1 or go get tested. 3. some people may be in denial about such a serious health event occurring in their body or fearful of knowing. 4. lack of access to emergency services or nearby hospitals/clinics, etc.



Acute Illnesses & OPQRST

Review:

The SOAP note (Subjective, Objective, Assessment, Plan) is a method of documentation used by providers to write out notes in a patient chart. The Subjective portion of the SOAP consists of all the questions asked to gather information. The SAMPLE history (Signs/symptoms, Allergies, Medications, Past history, Last oral intake, & Events leading to illness/injury) is an important part of the Subjective data gathering.

OPQRST-AAA:

Another critical portion of the Subjective section for an acute illness is the specific set of questions about the symptoms and history of present illness which may help in diagnosis and treatment. One mnemonic for this set of questions is OPQRST. This particular set of questions is often used methodically when a heart attack is suspected, but can also be used for a range of other illnesses such as headaches, stomach pain, and more. The table below summarizes the questions included in OPQRST.

VOCABULARY:

Acute illness: a disease with a rapid onset and/or a short course

mnemonic: a learning device that helps one remember information

provocation: creating a negative response (in this case, the symptom in question)

palliation: to relieve the symptoms of a disease

Letter	Meaning	Questions
O	Onset	What were you doing when it started (active, inactive, stressed)? Did it start suddenly, gradually, or is it part of an ongoing chronic problem?
P	Provocation or Palliation	Does any movement, pressure, or other external factor make the problem better or worse? Are the symptoms relieved with rest?
Q	Quality of the pain	Can you describe the pain? Is it sharp, dull, crushing, burning, tearing, or some other feeling? Is there a pattern, such as intermittent, constant, or throbbing?
R	Region and Radiation	Where is the pain located on the body? Does it radiate (extend) or moves to any other area? (Heart attacks can radiate through the jaw and arms. Other referred pains can provide clues to underlying medical causes.)
S	Severity	How would you rate your pain on a scale of 0 to 10? (0 is no pain and 10 is the worst possible pain.) Either "... compared to the worst pain you have ever experienced" or "... compared to having your arm ripped off by a bear".
T	Time (history)	How long has the condition been going on? How has it changed since onset (better, worse, different symptoms)? Has it ever happened before?

Note: The questions do not have to be asked in the exact order listed. The patient interview should be conversational and have a smooth flow, so sometimes the order should be adjusted.

NEW INFO:

Previous lessons on the SOAP next (from prior modules) include: Lesson 1.8 – Intro to SOAP Note; Lesson 2.9 – Vital Signs; Lesson 4.8 – SAMPLE history.

Some sources also have AAA (as in OPQRST-AAA). The additional A's stand for Associated symptoms, Alleviating and Aggravating factors, and Attributions/Adaptation. If students are at an advanced level and can handle more to remember, or would want to guess why these additional question categories might be useful, these could be presented to students as extra notes.

Select one or more volunteer students ahead of time and ask them to answer the questions based on the last headache or stomachache they had. (They can make it up!) Going through this information the first time in a more authentic question/response format will help it "stick" better for students.



Know the Signs and Symptoms of a Heart Attack

About Heart Attack

- A heart attack happens when the **blood supply** to the heart is **cut off**. Cells in the heart muscle that do not receive enough oxygen-carrying blood begin to die. The more time that passes without treatment to restore blood flow, the greater the damage to the heart.
- Every year about **715,000 Americans** have a heart attack. Of these, **525,000** are a first heart attack and **190,000** happen in people who have already had a heart attack.¹
- About **15%** of people who have a heart attack will die from it.¹
- **Almost half** of sudden cardiac deaths happen outside a hospital.²
- Having high blood pressure or high blood cholesterol, smoking, having had a previous heart attack or stroke, or having diabetes can increase your chance of developing heart disease and having a heart attack.
- It is important to recognize the signs of a heart attack and to **act immediately** by **calling 911**. A person's chance of surviving a heart attack increases if emergency treatment is administered as soon as possible.

Symptoms of a Heart Attack

The National Heart Attack Alert Program notes these major signs of a heart attack:

Chest pain or discomfort. Most heart attacks involve discomfort in the center or left side of the chest that lasts for more than a few minutes, or that goes away and comes back. The discomfort can feel like uncomfortable pressure, squeezing, fullness, or pain.

Discomfort in other areas of the upper body. Can include pain or discomfort in one or both arms, the back, neck, jaw, or stomach.

Shortness of breath. Often comes along with chest discomfort. But it also can occur before chest discomfort.

Other symptoms. May include breaking out in a cold sweat, nausea, or light-headedness.

If you think that you or someone you know is having a heart attack, you should **call 911 immediately**.

Source: CDC Heart Attack Fact Sheet

DISCUSS

One study showed that women are two times as likely than men to call 911 if they are showing signs of a heart attack. What might explain this finding?

READ:

Ask student another name for a heart attack (Myocardial infarction—or MI—from the Do Now). Ask them why this is the medical name (Myo = muscle; Cardi = heart; Infarction = tissue death caused by a local lack of oxygen).

Ask students if they know what happens when an infarction affects another part of the body, besides the heart? (ex: lungs = pulmonary embolism; brain = stroke; limbs = blood clot)

An excellent visual slide show of information about heart attack/heart disease can be found here: <http://www.webmd.com/heart-disease/ss/slideshow-visual-guide-to-heart-disease>

DISCUSS:

Another excellent news article can be found at: <http://online.wsj.com/news/articles/SB10001424052702304432704577347723157872672> A wonderful graph in this article summarizes the benefit of exercise (70% reduction if one gets 30 min a day; 63% with 20m a day; 47% with just 10m a day)



Role Play: OPQRST Interview

Goal: Practice the OPQRST interview from both angles, the patient and the health care provider

Directions:

1. Choose your starting roles. One person will be an emergency room triage nurse. The other will be a patient who has driven to the hospital, worried about chest pain.
2. Patient uses the first column in the table to record brief details about the chest pain, so they are prepared to act convincingly and answer all questions.
3. Healthcare provider begins the patient interview by asking questions and use the first column in the table below to record the OPQRST information.
4. Switch roles and repeat, using the second column.

	Patient #1	Patient #2
O		
P		
Q		
R		
S		
T		



What was most **challenging** about the OPQRST interview? (Consider both the healthcare provider and the patient perspectives)

THINK:

Allow students to choose a different scenario (besides chest pain) for the 2nd round when they switch roles, to keep things fresh and interesting.

Encourage students to write brief shorthand notes, but to balance this with the need to document enough to provide a clear picture to someone else who is reading the patient's chart.



Identifying OPQRST

Identify the correct portion of the OPQRST interview for each patient statement below.

- _____ 1. The pain in my head is a 9.5. It's the worst pain I've ever felt.
- _____ 2. My head throbs all over, as if someone is squeezing my brain.
- _____ 3. Why I turn off all the lights & get under the blankets it feels better.
- _____ 4. It started last night around 11:30pm.
- _____ 5. My headache has started to move into my neck.
- _____ 6. It stopped hurting about an hour ago.



Write An OPQRST Interview Script

Goal: Practice the OPQRST interview for an acute illness

Directions:

- 1. Choose any acute illness.
- 2. Research the illness so you understand how a patient may respond when interviewed.
- 3. Write out the dialogue between the healthcare provider and patient for an OPQRST interview.
- 4. Find a partner who will agree to help you act out your script in case you are called on to present your interview next class.

ASSESS:

Answers:

- 1. Severity;
- 2. Quality;
- 3. Palliation
- 4. Onset
- 5. Radiation/Region
- 6. Time

HOMEWORK:

The purpose of this assignment is for students to practice one more time so that this starts to become more comfortable and they are ready for the case study, where they will interview a mock patient in real time and would not want to miss one of the important parts of OPQRST.