SIMULATION SCENARIO DEVELOPMENT TEMPLATE

Scenario name: Chest Pain

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Institution: Univ. of Wash. School of Nursing

Target audience: Undergrad ☐ Grad ☑ Other:

Goal/Purpose: To provide novice advanced practice students for their first clinical placements

Lab Set-up

Patient simulator/Task trainer: SimMan or VitaSim

Patient characteristics: Female/male dressed in street clothes, swollen ankles, age 47, Hispanic

Vital parameters, beginning: BP 136/82, Pulse 88, RR 16, O2 Sat 98%; friction rub right lung.

Environment/setting/location: St. Elsewhere Family Practice Clinic exam room.

Lab staff needed day of simulation: Program manikin, run scenario; Pt Voice; orient; debrief.

Equipment, supplies & prop list: Wheelchair, oxygen tank with mask; aspirin 325mg bottle, water; cardiac monitor; patient chart with recent normal EKG, Chest x-ray, lab results CBC, CMP, UA, clinician name tags, hand gel.

Learning Objectives

For a patient with chest pain, the learner will be able to:

1. choose communication and relationship development strategies for interaction with patient, patient family and preceptor.
2. Demonstrate advanced skills in performing an history & physical exam.
3. Formulate and deliver a case presentation in collaboration with preceptor that includes a rationale for choice of working diagnosis.
4. (Optional) Formulates a management plan and documents in SOAP note format.

Student Preparation

Pre-requisite knowledge/activities:

1. Experience with advanced cardiac and respiratory physical exam skills.
2. Review of problem-focused history-taking diagnostic health assessment for chest pain.
2. Clinical encounters and problem-focused visit lecture content reviewed.

Clinical Case Information

Case description/Patient history (HPI, PMH, Social Hx, FH):

47 year old female presents with chest pain x 4 hrs. Sudden onset sharp pain right side of chest. Pain 7/10 radiating to right shoulder. Took 3 OTC ibuprofen tablets with some relief 3/10. Lying/sitting makes it better. Deep breathing or coughing makes it worse. Felt feverish and chilled, did not take temp. No pain like this before. Cold 10 days ago with spasmodic dry cough, worse at night; other cold symptoms have resolved. No trauma to chest or other illness. Denies shortness of breath. Has chronic bilat LE edema. Scared she is having a heart attack like her father. PMH: Hyperlipidemia x 4 yrs, controlled with med and diet. No hx arthriits, asthma, COPD, CAD, DM, GERD, anxiety or panic attacks. FH: Father died age 50 MI; Mother 67 alive and well. SH: under a lot of stress due to recent loss of job as mortgage broker; married with 2 children. Non-smoker ever; alcohol at holidays; no street drugs ever.

Medications and Allergies (MAR):

Allergies: NKDA
Simvastatin 20 mg daily for hyperlipidemia
Ibuprofen 200 mg 2 tabs tid for pain
Claritin 10mg daily for hay fever

Actor Roles and Behavior Overview
Actor/Role – Brief overview of behavior during scenario

1. Advanced practice nurse - Perform focused H&P for chest pain.
2. Spouse - Express concern about spouses symptoms and possible heart attack. Not overly intrusive. May answer questions for patient if patient unresponsive.
3. Preceptor - Be available to help student; offer help if history taking more than 10 min. Assist with formulating differential diagnosis, rationale, working diagnosis (management plan optional).
4. Observer (may be faculty or student) - Take notes on interactions between actors, type of questions (open/closed); sequence of events. Checklist may be provided.
5. Medical assistant or CNA - Brings in normal EKG results. Comes in with oxygen set-up and asks if it is needed and what else might be needed such as cardiac monitor, aspirin/cup of water.

Scenario Events and Expected Actions
Events in chronological order – Expected actions

1. Spouse sitting next to patient - APN enters room and introduces self & role to patient and spouse. If no introduction, someone asks who APN is.
2. "Patient" coughs occasionally & voices right-sided chest pain after each cough - APN student asks history questions related to cough and chest pain. Continues to cough and express discomfort right side.
3. APN takes a history for presenting problem of chest pain - Thorough and organized problem-focused history in approx. 10 min. Attends to patient answers and needs.
4. APN performs a focused physical exam - Skilled physical exam based on patient history including branching exams. Identifies friction rub right lung field.
5. Case presentation to preceptor - Steps out of room and give concise and accurate case presentation to preceptor. Discusses differential diagnosis, working diagnosis--costochondritis, post-infectious cough; pleuritis, psychogenic chest pain.
6. Optional Management Plan - Order EKG to be done stat. Consider giving aspirin 325mg one po now and/or oxygen at 5 L/min. by mask. Explains EKG results to patient and spouse; offers reassurance. Order chest x-ray, CBC, CMP and UA. Send home with instructions on taking ibuprofen, rest, fluids, and when to go to ER.

Debriefing Points

What went well?
What would you do differently next time?
What additional history of physical exam would you have done if you could do it again?
What what was most difficult about doing a case presentation with so minimal preparation time.

References
Evidenced-based practice guidelines, protocols or algorithms used in creating scenario:

Dains, Baumann, & Scheibel (2007). "Advanced Health Assessment and Clinical Diagnosis in Primary Care", 3rd Ed.
Uphold, CR, Graham, MV (2003). "Clinical Guidelines in Family Practice", 4th Ed.

Key Words:
Chest pain; Geriatric;Graduate-novice; Outpatient, Clinical reasoning; SP, High fidelity manikin