HOW TO WORK THROUGH THE VIGNETTE WORKSHEETS

Let's take a journey into the world of diagnosis. You, the astute Nurse Practitioner student are going to become the astute diagnostician over the next 16 weeks. Each week, based on the system you are covering, such as gastrointestinal or endocrine, you will be given a case to solve. Playing the Provider Practitioner in this scenario, you will read and analyze the case, make an astute diagnosis and save the patients life.

#1. THE PATHOVIGNETTE WORKSHEETS

Step #1: **READ the case scenario and circle, color highlight, and underline any important signs, symptoms, epidemiological characteristics, risk factors etc. that you think are important.** This will help you "diagnose" the patient.

- choose your diagnosis and write it on your sheet
- **HINT** there is A LOT of clues within the pathovignette that will help lead you to the diagnosis- consider labs, presentation, signs, and symptoms. These have all been carefully chosen by your professor to get you to think like a practitioner☺.

Step #2: ANSWER THE QUESTION What is this?

- WHAT IS THE DIAGNOSIS? To the best of your current knowledge level and what you think the diagnosis is >>>> answer this question. You may be right, or you may be wrong, but remember this is learning for both ends of the spectrum. I am most concerned about the PROCESS of how you are getting the diagnosis and how you are using patho, etiology, etc. in formulating the diagnosis. We will develop this process over the entire semester. Give it your best effort and I promise, it will get better with time. This semester is about learning more about the process of "diagnosis"..... and you are work in progress. If you already knew this then ..well I wouldn't need to be teaching it. ☺

STEP #3: **SYNTHESIZE THE MATERIAL related to etiology, pathogenesis, epidemiology, classic presentation, risk factors and the differential diagnosis.**

ETIOLOGY: What is the etiology ??– this is what causes the disease at the cellular level-so an example may be genetic, or environmental (if environmental, what might those be?), or it may be related to toxic exposure. (This is not the (process) pathogenesis of the disease, but the spark that gets the process started)

EPIDEMIOLOGY: Who, when, and where ?? are there any female to male predilections, any ethnic predilections, are there any geographical regions have a preponderance to get the disease?
An example: F>M by 3:1 ratio, affects women of childbearing age 15-45 ages; racial gradient has African>> Asian>>Caucasian descent (this reads as Black/African descent gets it more than Asian and gets it more than Caucasian/White) and it is could be more severe in AA then in Caucasian ancestry if that is what the epidemiology states).

CLASSIC PRESENTATION: What are the classic signs and symptoms of the disease? CONSIDER ALL the classic symptomatology that would present for your chosen diagnosis. Please delineate in order of most prominent at the top to least prominent. For each positive symptom please use a different color, or highlight but give an idea which is your positive or negative (red =positive- blue =negative)
So how do you get the positive and negative findings? refer back to your pathovignette: If the patient has the symptoms, then it is RED/positive; if the patient DOES NOT have the symptom then it is negative and blue.
Why does this matter?? When you start interviewing patients and developing a differential diagnosis you must understand ALL the potential signs and symptoms that a patient may present with- some will be present, others will not. Not all patients present with that "classic symptomatology" so you need to know all

signs and symptoms. This along with epidemiology (the who and when) of a patient presentation will LEAD you to a diagnosis.

PATHOGENESIS: this is the pathway that occurs after I have an etiological trigger. This is the sequential or simultaneous way that changes occur at the molecular and cellular levels to manifest the disease. This should be written out as a flow sheet in a way. So after you have your suspected diagnosis, you should be on Emedicine/Medscape and look up the pathogenesis. You should read this and then extrapolate the HIGH YIELD patho from it and write it out. For example: So, I have lead poisoning >> lead level greater than 5 (adults and 3.5 (children) via >inhalation/ingestion/skin absorption of the small lead particles begin to accumulate within tissues after it is quickly absorbed in the blood system >>> main tissues impacted are the brain, kidneys, and blood cells/bone marrow. Bone is a major repository of the lead buildup of lead over the years. Signs and symptoms that are seen are due to the involvement of those areas. Kidneys: lead is a potent toxin to the renal tubules, leading to Fanconi syndrome, proteinuria, phosphate dysregulation, and aminoaciduria. Cardiac toxicity leads to HTN, CAD, increased stroke risk, and PAD. Neurological compromise is present, especially ion children, as growth delays are seen secondary to mitochondrial calcium issues, protein C kinase, neurotransmitter interference at the pre-synaptic terminal. This is an example of the how the pathogenesis would look.

DDX: THE DIFFERRENTIAL DIAGNOSIS is ***other*** diseases/conditions that you would consider when you are working up this presentation. SO, where do you get the differential diagnosis from? My best recommendation is to use reputable medical sites. I am asking you refer to Emedicine (MEDSCAPE) as this is the best (Free) site to help with these sheets. THE DIFFERENTIAL IS KEY. Here I want to see how you could decide this is not the potential diagnosis. I need to see HOW you would rule it in or rule it out >>> this is by symptoms present on the Pathovignette, lab work, or epidemiological characteristics. These are situations that would point you towards the differential or by you rationalizing why it would be less likely the diagnosis.

ANSWER THE QUESTIONS. Each pathovignette will have 3-8 pathogenesis-based questions based on what the etiology may be, writing it out again helps cement the process in your memory. You are not studying to pass a test; you are studying these concepts to save someone's life. One day it will be just you and the patient, and you will be the only person keeping them out of the grave. Understand the rationale behind why you need to answer these questions is paramount to becoming an astute diagnostician.

After the worksheets are completed, you may refer to the attached answer sheet for your reference. Please use these sheets as they were designed and do not look at the answer sheet until you have diagnosed the patient and played Provider Practitioner and solved the case.

Good Luck in "diagnosing" the pathovignettes..... Any questions reach out via email.

#2. HOW TO WORK THROUGH THE PHARMVIGNETTE WORKSHEET

This worksheet is designed as an evolving learning resource. For each vignette you should highlight, underline, color-code, and circle items you think will aid in prescribing medication for the condition. You must determine a few things before you can "write that prescription" which is one of the main aims of this resource.

Step 1: Read and analyze the vignette and look at the diagnosis (it is given). There are clues within the vignette that will "add to or be a contraindication to" certain medications and may be pertinent to prescribing. You are shifting your focus into prescribing medications.

Things to consider in the reading the PV:

1. Look at the past medical history and the medications. To the best of your current knowledge level analyze and review the patient's regimen, ask yourself "is adequate for the PMHX and current complaints"?

2. Are there any red flags concerning the medications? Make a note if anything jumps out at you, or when you are reading (book/references) something "flags" your thought process.

> (A) If the questions of the specific vignette do not ask you a question regarding med rec/interactions, then this is merely an exercise to get you in the process of interrogating the patient's medication list. NOTE***You will do this every day and every interaction with a patient. so the better you are at performing a med review, then transitioning into a provider will be "easier". Mark questions you may have, make notes of anything you would like to discuss.

3. The diagnosis has been given. There are no "trick" diagnoses. It is what it is. When you are reading about it, you should be synthesizing the signs, symptoms, labs, imaging, and physical assessment to confirm your diagnosis. One thing you want to start becoming aware of when you are moving into prescribing medications is the "severity" of the presentation. So always ask yourself "What is the severity?". This will drive your decisions in many algorithms and decision trees.

> This is an exercise to improve and learn how patient presentations are in clinical and how you will approach the interaction. Using the abovementioned steps is a way of getting comfortable with this process will only help you immensely when you are in clinical and prescribing medications.

Step 2: Answer the questions: You analyze the problem and should have a good understanding of the presentation (from patho) as this will drive the plan. The answers are all in your book or available from any resource that has medications and diseases (such as Up to Date ® or Epocrates ® or Emedicine ®). Other things to consider for completeness and optional advanced learning skills include:

a. Is the patient medicated appropriately for the current history?

b. Are there any adverse medication reactions that could be manifesting as a complaint?

c. Is there any unnecessary medication?

d. What would you like to do for this patient and problem?

i. When asked to "Briefly develop a medication plan" please refer to either Emedicine/Medscape or any other clinical reference guide you have access to and formulate a BRIEF pharmacological plan on what is appropriate in this clinical scenario.

a. Non-pharmacological, pharmacological, lifestyle, dietary-include best plan.
b. Include which medications you would like to prescribe – have all components of dosage, route, and frequency.
c. Understand the rationale of why you selected that specific medication; and this will aid in class discussion

Since this is a worksheet, use it for many resource options, for clinical, for practice, as a reference in class. I treat all my resources given on this website as a “running” guide to medical management related to common case scenarios you will see in the Primary Care setting.

Hope this helps and happy learning, Professor JaimaLee 😊