

Cross Course Collaborative Case Studies: An Innovative Teaching Strategy to Enhance DNP Learning

Katie Lothe, DNP, RN, FNP-BC, APNP, Wendy Halm, DNP, APNP, FNP, CNE & Tracy Saladar, DNP, CPNP-PC, PMHS, APNP

701 Highland Ave, Madison, WI 53705 * 608-263-7443



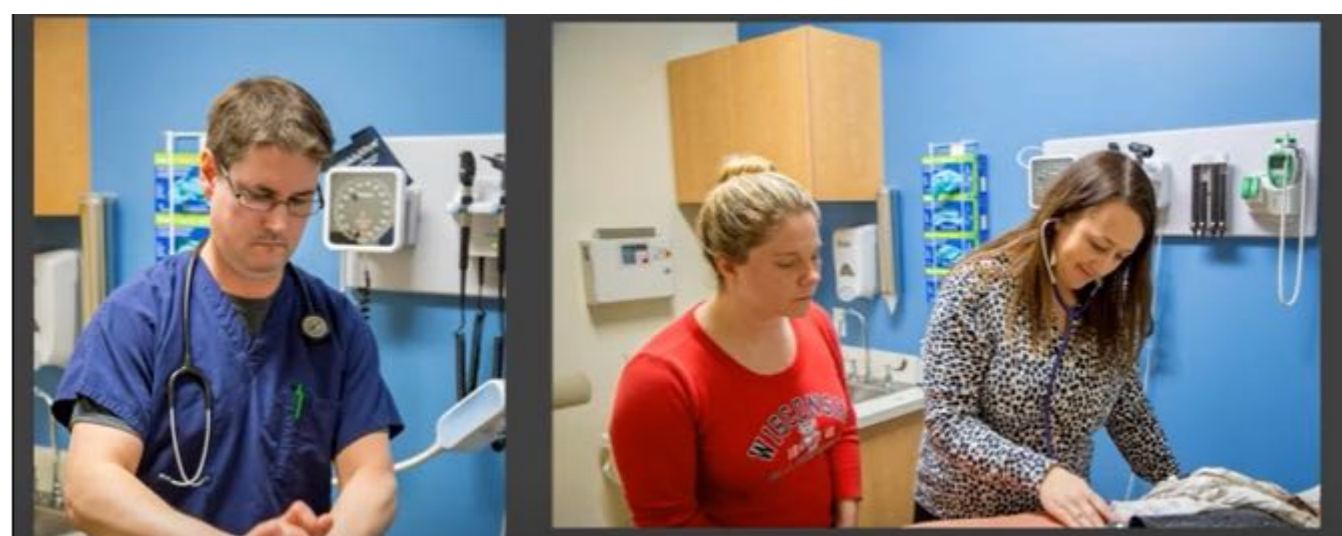
School of Nursing
UNIVERSITY OF WISCONSIN-MADISON

Background

Delivering cohesive content to promote development of critical thinking ability is a challenge many DNP programs encounter. Development of courses and content in singularity often leads to content redundancy and inadvertent omissions. There is a missed opportunity for faculty to work together to leaf concepts between courses. DNP students also face challenges in their learning, including struggling to **make connections between content and practice**. Learners with a limited or weak self-confidence lack the ability to trust their own judgement and feel good about their clinical decisions. Case based learning has been shown to increase a student's **critical thinking ability**. To increase student understanding of content and promote a higher level of cognition, **an innovative teaching strategy** was developed challenging students to apply their new clinical knowledge between courses.

Purpose

The purpose of this project is to share this teaching strategy which can be used to promote **cross course collaboration** and help students apply learned knowledge to real world clinical situations. Courses within DNP programs should be cohesive and promote leafing of content, to **strengthen student understanding of material and increase student confidence** in the classroom and in clinical practice.



Process

DNP Faculty members worked to align content and the timeline of delivery between Advanced Health Assessment & Advanced Pharmacology courses. Faculty members across populations worked to identify areas of content that were most problematic for students and shared case studies were then developed to address these systems. Students were introduced to a population appropriate case study in Advanced Health Assessment and completed it in Advanced Pharmacology. Teacher to learner, learner to learner, learner to content interactions were utilized.

Key learning outcomes included ability to:

- Construct accurate, succinct documentation
- Formulate differential diagnoses
- Verbally present the case to course faculty
- Create a treatment plan including pharmacologic and non-pharmacologic treatments, education, anticipatory guidance and follow up care specific to the patient/family system within the case study

601-605: Case Studies:
GI - Abdomen

Case #1:

Reason for Visit: "Abdominal Pain"

Your patient is a 41 year old Caucasian male with a chief complaint of abdominal pain.

Over the last month, your patient reports gradually worsening abdominal pain. He describes this as a gnawing pain that is located above his belly button. He feels the pain is there first thing in the morning, almost making him nauseous, then waxes and wanes as the day goes on. He gets a lot of heart burn during the day and sometimes at night feels like he's burping up acid. He has taken over the counter Tums, was happening like once a week, now is taking them most days. They help temporarily. He is having some nausea without vomiting. He has been having more constipation, so he has been drinking more coffee to help with that- no blood in the stool.

Past Medical History: Anxiety (dx 2010) Essential Hypertension (dx 2017), Hyperlipidemia (dx 2017), Left shoulder injury (2 months ago)

Social History: 1 ppd smoker x 20 years, works as a project manager- just promoted to a new more stressful role, regular alcohol use 3-6 beers most nights, vegetarian diet, drinking 3-4 cups of coffee per day and 1-2 mountain dew's per afternoon

Medications: Takes medications as prescribed. Prescriptions are covered through insurance from your work

Medication	Dose	Route	Time to take	Indication
Metoprolol	100 mg	po	BID	Hypertension
Simvastatin	20 mg	po	PM	Hyperlipidemia
Ibuprofen	800 mg	po	TID PRN	Shoulder Pain
Lorazepam	1 mg	po	PRN	Anxiety
Citalopram	20 mg	Po	PM	Anxiety

Allergies: Penicillin, Amoxicillin, Augmentin- all have caused rashes. No latex, environmental, food allergies.

RDS: Negative except as stated in HPI and Left shoulder AC separation in a biking accident 2 months ago. Completing PT and treating with ice and ibuprofen regularly

Pertinent Exam Findings:
Vitals: HR 96, temp 97.8, BP 130/88, RR 22, Pox 98% on Room Air
Weight #220, height 6'1"
Appears well, in no acute distress
Heart and lungs exam normal
(+) Sorel sounds x 4 quadrants. Localizes abdominal pain to epigastric area- no tenderness on light or deep palpation, no hepatosplenomegaly. Negative Murphy's, Rovsing sign, McBurney sign, obturator test.

601-605: Case Studies:
GI - Abdomen

N 601 Instructions:

- Using the provided information, construct the "S" and "O" portion of this focused note. Use the N 601 Shell/Maxwell for organization. Remember to include only the systems in the ROS & PE that are potentially related to the chief complaint. If there is missing or incomplete information, please add this information in **RED** to ensure that the documentation is complete. For example:

Objective:

Skin: Pale & warm. Slightly clammy. Nails without clubbing or cyanosis. No rash, petechiae or ecchymoses noted.

- Correlate your history and physical findings. Please list 3 differential diagnosis, in order from most likely to least likely. Provide pertinent positives and negatives to support your choices. Bring your work to class next week to review.

N 605 Instructions:

Initial Discussion Post:

- Post your top 2 diagnoses and pertinent positives and negatives as you have written them for 601.
- What lifestyle modifications would you recommend for treatment of these diagnoses?
- Assuming the patient had a positive H. Pylori testing, what would you then recommend for his treatment regimen?
- What education would you want to give the patient regarding this medication- both how it should be taken and any side effects to monitor for?

Implications for DNP Education

Cross Course Collaborative Case studies are an innovative teaching strategy that can be using for improving student ability to apply knowledge, strengthen understanding of material and increase student confidence in the classroom and in clinical practice.



Outcomes

Cross Course Collaborative Case Studies demonstrated increased student engagement, evidence of developing confidence assessing and planning care for a patient, and improved ability to apply knowledge from a faculty perspective. Student satisfaction was voiced and evidenced through the campus course evaluation process.

References

- Bradshaw, M.J., Hultquist, B.L. & Hagler, D.A. (2021). Innovative teaching strategies in nursing and related health professions (8th ed.). Jones & Bartlett Learning.
- Li,S., Ye, X, & Chen, W. (2019). Practice and effectiveness of "nursing case-based learning" course on nursing student's critical thinking ability. Nursing education in practice, 36, 91-96.