

## Interprofessional Education: A Collaboration Between Nurse Practitioners and Pharmacists

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### Objective

- After this presentation, the participants will be able to:
  - Identify a potential area where collaboration with Pharmacy faculty can enrich the learning environment for the Nurse Practitioner student

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### Interprofessional Education

- Emphasis is given to the use of interprofessional education in all programs of study
- Nursing faculty are looking for opportunities to collaborate with other disciplines in the education of our students
- Nursing and Pharmacy are in excellent position to collaborate and teach students jointly

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## Interprofessional Education



- Pharmacists are the experts of pharmacodynamics and pharmacokinetics of medications
- Nurse practitioners use this knowledge and apply it to a patient where the textbook treatment may not be appropriate for the patient
- Nurse practitioners and pharmacists frequently collaborate in the treatment of patients

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## Interprofessional Education



- Advanced Practice Nurses need to understand:
  - Pharmacology principles
  - How medications fit into the patient's lifestyle and disease condition
  - Appropriate monitoring and follow up
  - Understand the role of pharmacists in the treatment of a patient
  - How to communicate and approach a colleague in order to collaborate

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## Interprofessional Education



- Pharmacists activities
  - Physical and verbal assessments
  - Ordering/interpreting labs
  - Referring patients to other health care professionals
  - Prescribing medications (Advanced Scope of Practice)
  - Ensure optimal medication outcomes
  - Prevent/reduce drug related morbidity and mortality

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## Interprofessional Education



- **Pharmacists focus**
  - Medication reconciliation
  - Anticoagulation
  - Antimicrobial stewardship
  - Pharmacokinetic drug management
  - Drug Information
  - Medication safety
  - Formulary management
  - Medication dispensing/order verification
  - Protocol/order set development

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## Interprofessional Education



- **SDSU College of Pharmacy Faculty**
  - Practice sites
    - Ambulatory/Primary Care Clinics
    - Hospitals/Health Systems
- **Faculty specialties**
  - Internal Medicine
  - Psychiatry
  - Pediatrics/neonatology
  - Critical Care
  - Infectious Disease
  - Hypertension
  - Diabetes
  - Lipid Management
  - Anticoagulation
  - Heart Failure

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## Interprofessional Education



- **Pharmacotherapeutics for Advanced Practice Nurses**
  - Many College of Pharmacy faculty teach the same topics to PharmD students
  - PharmD student topics usually based on a 3 hour lecture
  - Focus of lectures for Advanced Practice Nurses is changed from PharmD student lectures

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## Interprofessional Education



- **Lecture focus for Advanced Practice Nurses**
  - Medication therapy
    - Mechanism of action
    - Dosing
    - Adverse reactions
    - Warnings/contraindications
    - Medication therapy choice
    - Clinical pearls
    - Patient counseling

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## Background



- **In the past, Advanced Pharmacology was taught by the College of Pharmacy**
- **Students reported a disconnect between content and what was occurring in practice**
  - Some medications were outside the scope of the Family Nurse Practitioner
  - Some treatments were not used in practice

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## Background



- **A collaboration between the College of Nursing and College of Pharmacy occurred as a result of feedback**
- **Content of the course would be taught by the College of Pharmacy**
- **Application of content would be taught by the College of Nursing**

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## Advanced Pharmacology



- Content taught on-line in 7 Modules
- Each module taught by pharmacists who have extensive knowledge of the content
- Each module also has an application assignment in the form of case studies that utilize the information presented in the module applied to a patient
- Nurse practitioner evaluates application assignments

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## Advanced Pharmacology



- Modules are presented entirely on-line through:
  - Assigned readings
  - PowerPoint
  - Online notes
  - Voice-over Lectures
  - Study Guides
  - Case Studies

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## Advanced Pharmacology



- Module Assigned Readings:
  - Pharmacotherapy: Principles and Practice; Chisholm-burns, et al, editors. New York, Chicago, San Francisco: McGraw-Hill, 2013. 3<sup>rd</sup> edition
- Clinical Applications Assignments:
  - Pharmacotherapy Casebook: A Patient-Focused Approach; Terry L. Schwinghammer (Editor), Julia M. Koehler (Editor) McGraw-Hill, 2011

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## Advanced Pharmacology



- Nursing and Pharmacy work together prior to start of the course to identify any needs or changes in the course
  - Addition of increased pediatric and geriatric content
  - Objective changes
  - Concepts or activities that worked well or needs improvement

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## Advanced Pharmacology



- A Family Nurse Practitioner reviews the content as it is placed in the course
- If content differs from practice, the faculty discuss the content
  - Accutane
  - Beta blockers in heart failure
- Pharmacy faculty will also ask what is being seen by Nurse Practitioners in practice compared to the Pharmacists practice

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## Assessment



- Pharmacotherapeutics:
  - 7 online content exams (1 for each module)
  - Pharmacists write exam questions
- Clinical Applications:
  - 6 Clinical Application Assignments
  - 1 Clinical Applications Exam
    - Nurse Practitioner writes exam questions

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## Application



- To apply the concepts, case studies are utilized
- Case studies include:
  - Students need to “prescribe” appropriate treatment for the diagnosis considering co-morbid conditions
  - Order diagnostics and follow up
  - When collaboration with a pharmacist would be appropriate
  - The role of the pharmacist in clinical practice

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## Application



- Students also take an application quiz that pertains to practice
- Includes:
  - Scheduled medications and restrictions on prescribing
  - How to write a prescription
  - Prescribing pressure
  - Drug Tiers
  - Responsible prescribing (safety)
  - Special population considerations

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## Collaboration



- Student issues are discussed between the College of Pharmacy faculty and College of Nursing Faculty
- Meetings with the student involve both faculty
- Joint decision making regarding consequences of student actions
  - Late assignments
  - Late tests

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## Feedback



• "I was extremely nervous to take this course as I knew it would entail a great deal of information and application. I was even more concerned when I saw how many instructors were assigned to the course. I can honestly say this has got to be the most organized and well produced courses I have had in my entire 3 years in this graduate program. They gave you all the important information up front and helped you navigate the wealth of information with ease, comfort and support. You could not tell there were "many cooks in the kitchen", everything flowed smoothly and highly efficiently. Great Job!!!! Thank you for making this an enjoyable class."

• Thank you for the learning opportunities provided in this class. I cannot say enough good things about the text-book you have chosen for this class; it has become "my Bible" with such a wealth of information and presented in a wonderful "user-friendly" format. Easy to read, not overwhelming, excellent information."

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## Questions?



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