International Medicine

Description of Rotation:

International Medicine refers to the provision of medical services in the outpatient setting in developing countries. Clinics can focus on providing preventive care and/or the management of acute or chronic conditions knowing that continuation of care may be interrupted for extended periods of time. Pharmacist-directed services may be disease state (e.g. DSM) or medication centered (e.g. MTM), and can be provided in a standalone (independent) clinic or in collaboration with other healthcare professionals, such as physicians, nurses and dieticians.

Goals of Rotation:

Facilitate student learning and critical thinking skills in an International Medicine environment in order to:

1. Understand patient healthcare needs.
2. Apply best care available at the time.
3. Enhance and reinforce didactic course work.
4. Develop a further appreciation for diverse culture and approaches to health care.
5. Develop interpersonal communication skills.
6. Describe the pathophysiology of common illness.
7. Understand and research common tropical disease.
8. Determine proper immunization for self and non-health care personnel who may accompany the team.
9. Explain monitoring parameters given the particular disease state and the treatment regimen (including efficacy, toxicity, side effects, and potential drug interactions).

Learning Objectives:

Upon completion of this rotation the student should be able to:

1. Appreciation of the cultural experience in a health care system different from the United States.
2. Determine common medical phrases that will help in explaining information to translators and patients.
3. Describe the symptomatology, physical findings, pathophysiology, diagnostic procedures, laboratory tests, primary and alternative pharmacotherapies, and non-pharmacological treatments for disease states encountered during the rotation.
4. Describe and understand the general principle of immunization, including appropriate schedules as well as immunizations required in specific patient populations. Demonstration of proper injection technique may also be assessed.
5. Provide recommendations for medication dose adjustments based upon pharmacokinetic and pharmacodynamic principles.
6. Provide appropriate monitoring parameters for the chosen treatment plan (including efficacy, toxicity, side effects, and potential drug interactions).
7. Effectively communicate the drug treatment plan to the patient with appropriate precautions and expectations.
8. Evaluate patient medication adherence and strategies for improving adherence.
9. Counsel patients on commonly prescribed medications and devices
10. Develop plans to manage commonly encountered disease states
11. Discuss the acceptance of alternative medicine
12. Document all appropriate recommendations and interventions.
13. Utilize basic physical assessment skills to evaluate patients and demonstrate basic competencies:
   a. Measure height, weight, temperature, pulse respiration rate, blood pressure, ideal body weight, and body mass index.
   b. Assess peripheral edema, cardiac and pulmonary sounds, and general findings of a routine diabetic foot exam (pedal pulses, proprioception, and sensory deficits by microfilament, etc.).
15. Demonstrate effective team building skills in working with existing providers, including physicians, nurses, healers, and community health workers.
16. Develop a complete summary of experiences gained during an international rotation for the purpose of educating students and faculty upon arrival to the United States.
Activities:

1. Patient interviews and care plans
   a. Medication Therapy Management
   b. Patient goal setting
2. Case/disease state presentations and discussions
3. Research drug information question
4. Educational programs
   a. Patients
   b. Medical Staff
   c. Students
5. Newsletter
6. Physical Assessment
7. Define patient goals for each disease state
8. Data collection
9. Required Readings
Common disease states encountered in the outpatient setting (*list not inclusive*):

1. Malaria
2. HIV/AIDS
3. Leprosy
4. Oral Health Issues
5. Vitamin deficiencies
6. Tropical Disease
7. Worms
8. Parasitic Diseases
9. Low-birth weight
10. Tuberculosis
11. Polio
12. Measles
13. Tetanus
14. Cholera
15. Venereal disease
16. Gonorrhea
17. Yellow fever
18. Typhoid
19. Burkitt lymphoma
20. Scabies
21. Fungus
22. Water-borne diseases
23. Jaundice
24. Clotting disorders
25. Hypertension
26. Asthma
27. Thyroid Disorders
28. GERD
29. Anemia
30. Pain Management
31. Nutrition
32. Allergies
33. URI
34. Osteoporosis
35. Osteoarthritis
36. Weight Loss
37. Sun Burn
Potential longitudinal activities to accomplish at site:

1. Identify and collect appropriate drug-related monitoring parameters for each assigned patient
2. Maintain an adequate patient data base for each assigned patient
3. Identify and prioritize drug-related problems for each assigned patient
4. Assess the appropriateness of each assigned patient's drug therapy
5. Construct a detailed pharmaco-therapeutic plan for each assigned patient
6. Present all patient data in a concise and meaningful fashion
7. Provides evidence-based regimens and monitoring plans for each patient
8. Obtain and write-up a patient medication history
9. Provide medication information to a unique cultural and socioeconomic diverse patient
10. Counsel a patient on their medications
11. Provide a verbal therapeutic plan recommendation to another health-care professional
12. Perform medication reconciliation for patients
13. Interpret diagnostic tests results for patient/caregiver/or preceptor
14. Take a patient's blood pressure
15. Take a patient’s pulse
16. Assess a patient's peripheral edema
17. Take a patient's respiratory rate
18. Assess a patient’s temperature
19. Provide an optimal pain management or palliative care plan for a patient
20. Observe a Health Care professional perform a full physical examination and assess results
21. Recommend empiric antibiotic therapy
22. Assess the significance of a drug-drug interaction
23. Adjust a drug dose in a patient with renal insufficiency
24. Determine monitoring parameters for a patient being treated for an infectious disease
25. Prepare a handout for case presentation
26. Prepare an article for a newsletter or publication
27. Prepare a patient education sheet
28. Prepare a written drug information response in a practice setting
29. Provide an education presentation to pharmacists
30. Provide an education presentation to other health care professionals
31. Lead a Journal Club discussion
32. Participate in a Patient/Medication Safety Review or error reduction program
33. Participate in a discussion of a pharmacist role in ethical issues related to any of the following topics: end of life care, professional behavior, clinical research, and pharmacy current event/hot button issue