Research Curriculum at KCUMB-COM

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Background Information

- Section Components
  - Physical Diagnosis Skills
  - Communication Skills
    - Standardized Patient Program
    - Human Patient Simulator sessions
  - Manipulative Medicine Skills
  - Spirituality in Medicine
    - Lectures (5-6)
    - Round with a Hospital Chaplain
      - ½ day and fill out report of experience

Background Information

- Yearly Clinical Skills Exam (CSA)
  - Year 1 – concentrates more on interview with limited exam inclusive of OMM evaluation and the documentation of the encounter
  - Year 2 – Appears on the official transcript to show completion of an OSCE style exam (COCA requirement)
    - Pass/fail with 70% minimal competency
- Numbers of students returning for remediation of COMLEX-PE was unacceptable.

Background Information

- Mid-Year Clinical Skills Exam for Year 2
  - Give the student experience at the process
  - Indentify deficiencies for the student regarding skills
  - Allow time to work with students with problems during the spring semester prior to final CSA exam
- Buy in by Curriculum Counsel
- Started January 2010
- ECOP presentation by Des Anges Cruser, Ph.D on her project on Research module
  - Impetus for a change the week's plan
  - Also from input from ECOP research subcommittee

Lifelong Learning Skill Needed

- Research topics disappeared from the curriculum
- Indentify a need
  - Read and interpret a research article
  - Take the information from the page to the patient encounter
  - Apply the information to the management decisions for their patient.

Developing the Week's Schedule

- Dean of Curriculum Charge
  - Use the time to meet needs in the curriculum
  - Must have offerings for all students
    - Fill the time
    - Avoid students getting uneven break time
- Midyear CSA first week back after Christmas Break
  - Officially school is back in session
- Each CSA takes 4 days to accomplish
- Leaves 1 full day without planned curricular offerings

Developing the Week's Schedule

- Needed to plan for one day during the week
- Lots of time within the week to reach other issues of need
  - Needs also for practicing documentation skills
  - Research skills
  - Use some time for clinical application
  - Prepare for clinical rotations
    - Documentation and completion of H & P
    - Present & Participate at a Journal Clubs

2011 OCS 202 Midyear CSA Week Schedule					
	1-4-11	1-5-11	1-6-11	1-7-11	1-8-11
	Monday	Tuesday	Wednesday	Thursday	Friday
8:00	Basic Epidemiology	CS A Group B	CSA Group D	CSA Group A	CSA Group C
9:00	Research Design	Case 1 discussion	Case 2 discussion	Case 3 discussion	Case 4 discussion
10:00	Research Statistics				
11:00	Interpret a study for Practice				
12:00	Lunch				
1:00	Take a question to manuscript				
2:00	Select Trials in OMM Research				
3:00					

Basic Epidemiology Objectives

- **1. To understand the concepts behind epidemiologic reasoning, disease outcomes and determinants of health**
- **2. To be familiar with the sources of epidemiologic data**
- **3. To be able to measure and differentiate disease incidence and prevalence**
- **4. To understand the specialty of Preventive Medicine**
- **5. Be familiar with the different levels of prevention**
- **6. To know the contributions of epidemiology in the field of Medicine**

Research Statistics

- **Descriptive Statistics**
  - Measures of central tendency
  - Distributions
  - Variability
  - Associations
  - Scales of measurement (handout)

Research Statistics

- Inferential Statistics
  - Samples vs. populations
  - Statistical significance
  - Inferential tests for common medical studies (handout)
    - Chi-square
    - t-tests
    - Analysis of variance
    - Logistic regression (not in handout)

Research Design

- Describe the most common types of research/studies in health science
- Describe the strengths and weaknesses of each type of research
- Describe how each type of research uniquely contributes to the body of health science knowledge
- Indentify the characteristics of the various types of designs

Interpret a study for Practice

- To be able to indentify the research question or the hypothesis to be tested in the manuscript
- To understand the type of study design used
- To understand what is meant be target population and study population
- To understand the statistical tests used and its significance
- To understand the difference between association and causality
- To be able to identify any flaws or biases in the manuscript
- To be able to judge the value of the manuscript and its clinical significance

Take a question to manuscript

- At the completion of this session, students will be able to:
  - Formulate a research question
  - Identify the variables required to operationalize the study
  - Describe the relationship between the literature and the research question(s)
  - Identify and describe the components of a research proposal
  - Identify the sections of a manuscript and relate the sections of the manuscript to the research proposal
  - Identify the steps required to move from final paper to published manuscript

Select Trials in OMM Research

- Be able to state verbally and on a written
- examination:
  - 1. Examples of osteopathic manipulative medicine research since 2005.
  - 2. The results and conclusions of exemplary research studies.
  - 3. The strengths and limitations of each of the research studies.

Select Trials in OMM Research

- This lecture will:
  - 1. Review key research studies that will likely have an impact on professional and public policy and behavior.
  - 2. Provide an overview of research at the national osteopathic research center in Texas.
  - 3. Review example research studies from other professions that examine efficacy of manual treatments.

Assignments for the Week

- Complete the Research assessment tool for 2 assigned articles (6pts)
  - Knolls Article: Revisiting Castlio and Ferris-Swift's Experiments on Direct Splenic Stimulation in Patients With Acute Infectious Disease
  - A Population-Based Survey of Complementary and Alternative Medicine Use in Men Recently Diagnosed With Prostate Cancer
- Each student is given a case from Med Cases (18 points)
  - Fill out a differential diagnosis
  - What images/labs/studies needed and what you expect to learn from the test
  - What structural findings would be expected in the patient presentation
  - Complete an full admit H&P and admit orders for the patient

Assignments for the Week

- Complete an On-Line Assessment covering material from the lectures (18 pts)
- Complete CITI training (6 points)
- Perform the CSA
  - 70 points is pass with >70%
  - 50 points if <70%
- Points are applied to the spring semester OCS section grade.

Assignments for the Week

- If CSA failed: Faculty meet with all students
  - Based on what area(s) they were weakest
    - Communication skills
    - Physical examination
    - OMM
    - Documentation

What's Next?

- Need to assign faculty to review the documents
- Choose new articles so it is fresh each year.
- More evaluation in process
  - Await CQI evaluation for this semester