



DUKE MEDICINE

Clinical Pastoral Education - Research Seminar

CLASSROOM HOURS: Unit 1 (Jun-Aug) – 1 hour every other week for 14 weeks
Unit 2 (Sept-Jan) – 1 hour every other week for 14 weeks
Unit 3 (Feb-May) – 1 hour every other week for 14 weeks

INSTRUCTOR(S): **Nathan Boucher DrPH, PA, MS, MPA, CPHQ**
Email: Nathan.boucher@duke.edu
Office hours: By appointment, Duke South, 1st Floor, 502C
Presents approximately every other week during each unit
David Kwaku Hormenoo, PhD, CPE Supervisor/Research Coordinator

COURSE DESCRIPTION: Using chaplaincy practice in the academic medical center and the quality improvement framework as guides, this course focuses on variations in research methodology and experimental design. Chaplain residents are introduced to comparative strengths and weaknesses of study designs, overview of appropriate statistical analysis for specific study designs, methods of control, measurement, data collection, and guidelines for the professional communication of results. Students will also learn to conduct computerized database searches of medical literature, to evaluate evidence-based resources, and apply evidence-based criteria to decision-making. Emphasis is on the development of basic research literacy skills required to contribute to comprehensive, high quality health care delivery for patients and families. Ethical issues in health care and research are discussed, including Belmont Report standards and Institutional Review Board protocol. Students will have an opportunity to review, critique and produce work in accordance with scientific standards in the field.

COURSE PURPOSE: This seminar is designed as partial fulfillment of the requirement for research literacy for chaplains as supported by Pastoral Services Department of Duke University Medical Center.

COURSE OBJECTIVES: At the end of this course, chaplain residents should be able to:

- Discuss and understand the necessity/value of research for chaplaincy practice and professional development.
- Discuss, understand, and apply all methods of investigational study to evidence-based health care delivery; relate its usefulness to specific applications/fields.
- Discuss ethical, practical, and personal values related to research and institutional review board concerns.
- Describe different research methodologies and recognize the different types of studies that reflect them; discuss the importance of writing a methodology so that the elements for replication are easily understood.
- Understand different types of data collection techniques as well as their advantages and disadvantages.
- Understand the logic required as basis for formulating a research question or study hypothesis.
- Demonstrate ability to explain supporting evidence and results/outcomes.

COURSE OUTLINE:

Interpreting medical literature & identifying research problems
Literature Review and Methodology
Common Research Designs: Clinical Investigations, EBM, Clinical Reviews, Survey Research
Quantitative vs. Qualitative Research
Principles of Data Analysis
Results, Discussion, References
Ethics, IRBs and Protection of Human Subjects in Research

A RECOMMENDED TEXT (not required) Introduction to Research and Medical Literature for Health Professionals. J. Dennis Blessing, J. Glenn Forister, 3rd Ed. (2012/2013), Jones & Bartlett Learning

STUDENT ATTENDANCE: Chaplain residents are expected to attend all scheduled class sessions and remain the entire seminar period. Classes will start on time. Residents must inform Dr. Boucher by email if they will be absent (Nathan.boucher@duke.edu). Residents must come prepared to engage in small group discussion.

ACADEMIC INTEGRITY STATEMENT: Residents and faculty are expected to share a mutual respect for teaching, learning and the development of knowledge. Because intellectual integrity is a hallmark of scholarly and scientific inquiry residents and faculty are expected to adhere to the highest standards of honesty, fairness, professional conduct of academic work, and respect for all community members. Academic honesty supports our shared intellectual culture and our ability to trust one another. Students must avoid all acts of dishonesty, including, but not limited to:

- cheating
- plagiarizing (presenting the work or ideas of others as your own)
- fabricating (making up information, data, or research results)
- working with others when assignments or exams require individual work
- facilitating or tolerating the dishonesty of others

POLICY ON ASSIGNMENTS: You are expected to be able to write on a graduate level. If you need to review grammar, usage and/or punctuation, please do so **before** you turn in your work. The following resources may be useful:

- Capital Community College Foundation, (2010). Guide to Grammar & Writing. <http://grammar.ccc.commnet.edu/grammar/index.htm>
- Straus, J. (2007). *The blue book of grammar and punctuation*. Hoboken, NJ: Jossey-Bass/J. Wiley

CITI (Collaborative Institutional Training Initiative) ON-LINE TRAINING <https://www.citiprogram.org/>

Register (it is free): Register using *Duke University* as your institutional affiliation

Take: Biomedical Research Basic Course (22 modules that **EACH** must be passed with an 80% and you can retake before sending instructor the results page) – be prepared to dedicate about 2 hrs. to complete. Modules can be done at different times. Note the due date.

Print Certificate or send “screen shot” of certificate by email

HOW TO WRITE AN ANNOTATED BIBLIOGRAPHY (AB)

- 1) Based on a research question each trainee will formulate between sessions 1-4 (Unit One), trainees will find at least 12 articles from peer-reviewed journals (see “What is a peer-reviewed paper” below) that contain useful ideas and information on your topic. Look for a variety of perspectives (i.e. you need not look only in “medical journals”). You may use other seminal documents and important works – books, professional society “white papers” – but **12** must be from peer-reviewed journals.
- 2) Cite each article using **APA** style. See <https://owl.english.purdue.edu/owl/resource/560/01/> You may use AMA or another style, but you must be consistent throughout the document.
- 3) Write a succinct annotation under each citation that summarizes central themes and scope of the article. Be sure to include one or more sentences answering each of the following questions:
 - a) **Evaluate the authority of the author(s).**
 - b) **Identify the intended audience.**
 - c) **Compares and contrasts the work with other works you are also citing.**
 - d) **Explain how the work informs your chosen topic/research question.**

What is a peer-reviewed paper? The papers provided in this course are examples of peer-reviewed papers. In academic publishing, the goal of peer review is to assess the quality of articles submitted for publication in a scholarly journal. Before an article is deemed appropriate to be published in a peer-reviewed journal, it must undergo the following process:

- The author of the article must submit it to the journal editor who forwards the article to experts in the field. Because the reviewers specialize in the same scholarly area as the author, they are considered the author's peers (hence "peer review").
- These impartial reviewers are charged with carefully evaluating the quality of the submitted manuscript.
- The peer reviewers check the manuscript for accuracy and assess the validity of the research methodology and procedures.
- If appropriate, they suggest revisions. If they find the article lacking in scholarly validity and rigor, they reject it.
- Because a peer-reviewed journal will not publish articles that fail to meet the standards established for a given discipline, peer-reviewed articles that are accepted for publication exemplify the best research practices in a field.

ARTICLE CRITIQUES: Directions – READ CAREFULLY:

- Choose only one article from among those provided
- Take a Word or similar document and save your full name in the file name.
- Place your name at the top of the first page, cite the article in AMA style, and answer the following questions for the chosen article.
- Turn in on the date indicated.

ANSWER THESE QUESTIONS – INCLUDE THE QUESTION ABOVE EACH ANSWER

"YES/NO" is not a complete answer – *explain and defend*.

- Describe how well the cited literature supports the research objective(s).
- What is the study design?
- What is the study population? Describe both the target population (the larger population sampled from) and the study sample. If the two differ, in what ways do they differ?
- Describe the control/comparison group, if there is one.
- What was the sampling methodology?
- Is there a significant potential for selection bias – explain?
- What is the primary outcome of interest?
- What are the exposure (independent) variables? What are the outcome (dependent) variables?
- Are the time periods for variable measurements appropriate (temporality)?
- What other confounders or covariates were measured, if any? Were these sufficient?
- Do the article's conclusions follow from the study results?
- Are alternative explanations for the findings addressed?

DIRECTIONS FOR AB SHORT PRESENTATIONS: Note your presentation date. In 10 minutes answer each of the following:

- What is your topic?
 - Why is it important to you?
 - Why is it important to others?
 - What are 5 key points about your topic that you can impart to your audience?

*You may use a few slides, but will stop at 10 minutes. You must be well organized, clear & succinct.

EVALUATION OF RESIDENTS: Grading criteria include:

10% Quiz #1	10% CITI Certificate of Completion
10% Quiz #2	20% Annotated Bibliography (AB)
30% Article Critique	20% Short Presentation of AB findings

Schedule: *Please note* - You may have additional reading assignments. You will be notified by the instructor regarding changes/additions. This syllabus may be revised throughout the semester and you will be notified. Always make sure you are referring to the latest syllabus.

***Readings may be updated**

UNIT 1 Learning Objectives/The learner will be able to...		
<ul style="list-style-type: none"> • Describe the importance of research to improvements in health care delivery. • Describe the current and potential roles of the chaplain in research. • List and explain ethical principles pertaining to the protection of human subjects. • Describe the processes by which a researcher accesses/assesses peer-reviewed literature. • List and describe research methodologies used in health care research. • Describe the fundamentals of association, causation, confounding, bias, and error. • Describe epidemiologic principles of morbidity, mortality, prevalence, incidence, and their related rates. • Demonstrate research presentation skills. 		
Session # /Date	Topic	Reading/Assignments (complete by date)
1/June 8 (NB)	Introduction: course logistics & particulars; assessment of prior experience; learning how to <i>look</i> ; Why do research from chaplaincy perspective, in general? Your upcoming Annotated Bibliography (AB)	Familiarize yourself w/ syllabus Friedrich MD. The Affordable Care Act and hospital chaplaincy: re-visioning spiritual care, re-valuing institutional wholeness. <i>Journal of health care chaplaincy</i>. 2015;21(3):108-121.
2/June 15 (NB)	What do you want to get out of this seminar?; Ethics and protection of human subjects; Research terms	*continue with Friedrich Smith ML. Chaplaincy and clinical ethics: a common set of questions. <i>Hastings Cent Rep</i>. 2008;38(6):28-29. Emanuel EJ. Reform of Clinical Research Regulations, Finally. <i>N Engl J Med</i>. 2015.
3/June 22 (DH)	Discussion of articles and Implications for pastoral care	
4/June 29 (NB)	Preliminary activities: defining the problem, hypotheses, introduction to literature search (PubMed, CINAHL, others)	<i>Defining the Research Question</i> by DH Grosseohme, DMin
5/July 6 (DH)	Discussion of articles and Implications for pastoral care	Copy of your CITI Certificate of Completion is due
6/July 13 (DH)	Discussion of articles and Implications for pastoral care	
7/July 27 (NB)	High-level view of methodology available to researchers; Why choose what?	No readings to prepare; a handout/article will be provided at the session
8/Aug 3 (NB)	AB presentations; Association v. Causation: sufficient/necessary factors, confounding, bias, and error	RC, KR, AS-B present their Annotated Bibliography (AB) findings No readings to prepare
9/Aug 10 (NB)	AB presentations; Morbidity and Mortality in research: prevalence, incidence, rates	MT, CT, JvS present their AB findings No readings to prepare

10/Aug 17 (DH)	Discussion of articles and Implications for pastoral care	
11/Aug 24 (NB)	UNIT QUIZ #1 and quiz discussion	Quiz will cover all Unit 1 concepts
UNIT 2 Learning Objectives/The learner will be able to... <ul style="list-style-type: none"> • Describe the goals of quality improvement (QI)/QI research and the chaplain role. • List and describe qualitative study designs and their strengths and weaknesses. • Describe and demonstrate methods for qualitative data analysis. • List and describe quantitative study designs and their strengths and weaknesses. • Describe the fundamental concepts and processes of quantitative data analysis. 		
Session/Date	Topic	Reading/Assignments (complete by date)
1/Oct 6 (NB)	Quality Improvement (QI), QI research, and opportunities for chaplains	Grazier KL, Quanbeck AR, Oruongo J, et al. What Influences Participation in QI? A Randomized Trial of Addiction Treatment Organizations. <i>Journal for Healthcare Quality</i> 2015;37(6):342-353. Berlinger N. The nature of chaplaincy and the goals of QI: patient-centered care as professional responsibility. <i>Hastings Cent Rep.</i> 2008;38(6):30-33.
2/Oct 13 (DH)	Discussion of articles and Implications for pastoral care	
3/Oct 20 (NB)	Qualitative study designs including focus group, (semi-)structured interview, key informant, Delphi method, survey w/ practice example	Palinkas LA. Qualitative and mixed methods in mental health services and implementation research. <i>Journal of Clinical Child and Adolescent.</i> 2014;43(6):851-861.
4/Oct 27 (DH)	Discussion of articles and Implications for pastoral care	Annotated bibliography (AB) due
5/Nov 3 (NB)	Qualitative data analysis including content analysis, grounded theory, phenomenology w/ practice example	Continue - Palinkas LA. Qualitative and mixed methods in mental health services and implementation research. <i>Journal of Clinical Child and Adolescent.</i> 2014;43(6):851-861.
6/Nov 10 (NB)	Quantitative study designs including survey, experimental, observational, longitudinal, ecological designs	Overview of quantitative study designs will be provided prior to the session.
7/Nov 17 (DH)	Discussion of articles and Implications for pastoral care	
8/Nov 24 (NB)	Quantitative study designs including cohort and case-control designs	Continue with prior handout
9/Dec 8 (DH)	Discussion of articles and Implications for pastoral care	
10/Jan 12 (NB)	Quantitative data analysis, scales of measurement, statistical tests	Continue with prior handout; Quiz review

12/Jan 26 NB	UNIT QUIZ #2 and quiz discussion	Quiz will cover all Unit 2 concepts
UNIT 3 Learning Objectives/The learner will be able to... <ul style="list-style-type: none"> Describe and demonstrate the fundamentals of critiquing a peer-reviewed research paper. Describe absolute risk, relative risk, odds ratio, human v. random error, sensitivity, and specificity. Demonstrate how to display, interpret, and discuss research results. Describe key elements of writing and publishing in the research community as a chaplain. Demonstrate an understanding of the chaplain's role in health promotion and health care delivery. 		
Session/Date	Topic	Reading/Assignments (complete by date)
1/Feb 9 (NB)	"Yay!/Oh no!" - brief resident presentations	Each resident brings one peer-reviewed paper that supports <u>and</u> one that does not support a research hypotheses they have chosen.
2/Feb 16 (NB)	Assessing risk and benefit including absolute risk, relative risk, odds ratio	No readings to prepare; a handout/article will be provided at the session
3/Feb 23 (PG)	Discussion of articles and implications for pastoral care	
4/Mar 2 (PG)	Discussion of articles and implications for pastoral care	
5/Mar 9 (NB)	Quality of data including human error, random error, sensitivity, specificity	No readings to prepare; a handout/article will be provided at the session
6/16 (NB)	Discussion of Practice Article Critiques	Practice Article Critique due
7/Mar 23 (PG)	Discussion of articles and implications for pastoral care	
8/March 30 (PG)	Discussion of articles and implications for pastoral care	
9/Apr 6 (NB)	Results: Display/Interpretation/Discuss	No readings to prepare
10/Apr 20 (NB)	Writing and publishing (and communicating) in the health professions, the chaplaincy	de Vries R, Berlinger N, Cadge W. Lost in translation: the chaplain's role in health care. <i>Hastings Cent Rep.</i> 2008;38(6):23-27.
11/Apr 27 (PG)	Discussion of articles and implications for pastoral care	
12/May 4 (NB)	Chaplain role in health promotion and health care delivery; Your next steps?	Final Article Critique Due Gauger RW. The "un"doing of a hospital chaplain. <i>The Journal of Pastoral Care & Counseling : JPCC.</i> 2013;67(3-4):8.