Department of Maternal and Child Health
School of Public Health
The University of North Carolina at Chapel Hill

MHCH 702
Foundations of MCH
Spring 2017

When: Tuesday and Thursday, 8:00 AM – 09:45 AM
(Group work 8:00 AM-8:30 AM, Class begins at 8:30 AM)

Where: Lectures: McGavran-Greenberg 2301

Faculty: Tamar Ringel-Kulka, MD, MPH
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Teaching Assistant: Aria Gray
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Credits: 4 credit hours

Prerequisites: None. This is a core course required for MCH majors. Others require permission of instructor to enroll.

Format: Lectures, discussion, case study, and small groups

Maternal and Child Health (MCH) is the professional and academic field that focuses on the determinants, mechanisms and systems that promote and maintain the health, safety, well-being, and appropriate development of children and their families in communities and societies, in order to enhance the future health and welfare of society and subsequent generations.¹

The purpose of this course is to develop critical thinking about the determinants of well-being of the MCH population. According to Kurfiss,² critical thinking is “a rational response to questions that cannot be answered definitively and for which all the relevant information may not be available. It is defined here as an investigation whose purpose is to explore a situation, phenomenon, question, or problem to arrive at a hypothesis or conclusion about it that integrates all available information and that therefore can be convincingly justified. In critical thinking, all assumptions are open to question, divergent views are aggressively sought, and the inquiry is not biased in favor of a particular outcome.”

Major themes: This course is organized upon several major themes, which reflect the following important principles from the field of MCH:

Population-based. Public health practice focuses on the health of aggregates or groups. The population base for MCH includes all women, infants, children, adolescents and their families, including fathers and children with special health care needs, both domestically and globally.

Levels of prevention. The classic definitions used in public health distinguish among primary prevention, secondary prevention, and tertiary prevention. Primary prevention is the prevention of a disease or condition before it occurs; secondary prevention is the prevention of the onset, recurrence or exacerbation of a disease or condition that already has been diagnosed or for which a population is at risk; and tertiary prevention is the reduction in the amount of disability caused by a disease or condition to achieve the highest level of function. While focusing on primary prevention, public health and maternal and child health practice are necessarily attentive to the tradeoffs among the different levels of prevention.

Disparities. The Health Resources and Services Administration defines health disparities as population-specific differences in the presence of disease, health outcomes, or access to health care. Within the context of this course, the primary focus will be on disparities among groups defined by race/ethnicity, age, gender, socioeconomic status, nationality, and geographic location.

Life course perspective. In addition to the analysis of the relationship between concurrent exposure and health outcomes, a growing body of research highlights both the longitudinal and cumulative effects of these exposures. According to Michael Lu, Associate Administrator in charge of the Maternal and Child Health Bureau, the life course perspective is the, “conceptual framework…that recognizes that each stage of life is influenced by all the life stages that preceded it, and it in turn influences all the life stages that follow it.” Fundamental research and policy questions flow from this perspective.

Family-centered. Family-centered care assures the health and well-being of children and their families through a respectful family-professional partnership. It honors the strengths, cultures, traditions and expertise that everyone brings to this relationship. Family-centered care is the standard of practice which results in high quality services. Collaboration among patients, family members and providers occurs in policy and program development and professional education, as well as in the delivery of care.

Interdisciplinary. Interdisciplinary approaches integrate the analytical strengths of two or more scientific disciplines to address a given problem. Engaging a range of disciplines in collaboration broadens the scope of investigation into complex public health problems and yields fresh and possibly unexpected insights.
Competencies: This course addresses the interactions among economic, social, cultural, educational and health services factors that influence the health of populations of women, children and families, with attention both to the U.S. and other global settings. In recognizing the immense number of particular topics that any core MCH course could address, the developers of this course have selected topics that utilize the strengths of our faculty to address the following competencies in the context of a global perspective.

At the conclusion of this course, students should be proficient in:
1. Describing determinants of health and illness including biological, behavioral, socio-economic, demographic, cultural and health care systems influences;
2. Analyzing the foundations of scientific inquiry including, but not limited to, epidemiology and the uses and limitations of conceptual frameworks;
3. Appraising the purpose, rationale, activities, and performance measures for existing major MCH programs in the U.S. and other countries;
4. Illustrating the historical development of MCH public policies and practices, including relevant legislation, in the U.S. and other countries;
5. Explaining the organization and financing of health services in the U.S. and other countries and the position of MCH within the system;
6. Identifying the philosophy, values, and social justice concepts associated with family-centered, comprehensive, community-based, and culturally competent MCH and public health programs and services, including recognition of community assets; and
7. Combining and applying public health principles and techniques across disciplines to solve multifaceted problems within the context of family centered, comprehensive, culturally competent, community-based MCH programs and systems.

Requirements: Teaching and learning are interrelated. Both instructors and students are expected to be active participants in this course. The faculty responsibility has been to develop a core MCH course that addresses significant topics and concepts in the field and to prepare individual sessions, exercises and assignments that will facilitate student learning. Please realize that not all significant topics and concepts can be addressed by a two-semester core course. Topics and speakers have been chosen thoughtfully in order to give initial exposure to foundational concepts. The student’s responsibility as a learner is to engage with the course ideas, to come to class prepared to participate in class discussions, recitations and exercises, and to learn to think critically as she or he listens, writes and discusses.

Attendance. The Graduate School and the Department of Maternal and Child Health expect students to attend class on time and to stay until the end. To the extent possible, please inform the instructor if you know ahead of time that you will be absent or late for a class.

Class discussion leader. Over the course of the semester, many students will have the opportunity to introduce a class session. In this role, the student will be responsible for developing one concise discussion question based on that lecture’s readings, posting it to Sakai by midnight the day before, then facilitating a 10 minute class discussion at the

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3 Based on ATMCH competencies
beginning of the class session. More information regarding this assignment will be made available on the Sakai site.

**Required readings.** Readings will be made available through Sakai. Recommended readings will be suggested from time to time for students who wish to pursue selected topics in depth. Students are encouraged to share other helpful resources with the class.

**Written assignments.** There will be three papers this semester, providing an opportunity to address a question by integrating lecture and readings. Papers may be up to 1,000 words, double-spaced, left (as opposed to fully) justified, and with 1” margins on all four sides. The font must be Times Roman, and the font size must be 12.

Papers are due at **4:30pm** on the following dates. Papers must be submitted as a Word attachment to an email sent to Dr. Ringel-Kulka. Papers submitted late will lose points.

**February 3**  
**March 3**  
**April 14**

Please utilize the AMA Manual of Style when formatting references. Exact formats and citation styles for written assignments are based on What AJPH Authors Should Know from the *American Journal of Public Health*. BibWord ([http://bibword.codeplex.com/](http://bibword.codeplex.com/)) may be of assistance. I strongly encourage the adoption of an electronic citation system such as RefWorks, Mendeley, EndNote or others. Papers that use the incorrect formatting style will be returned without a grade.

**Evidence in written assignments.** The evidence base for these assignments consists of peer-reviewed articles, official reports by governmental agencies such as the DHHS, MCHB, CDC, etc., and official reports by international organizations such as the WHO and UNICEF. Statistics and facts that appear in lay publications, even respected ones such as the New York Times, Wall Street Journal or their international equivalents, should be traced to their original sources and cited accordingly.

**CASE STUDY GROUPS**

**Purpose:** Case-study groups are designed to foster opportunities to explore in depth a topic of interest, learn among a group of peers, and practice cooperation, negotiation, and delegation with peers.

**Logistics:** Groups will be organized by the instructor and will meet in person and/or online.

**Product:** This semester each group will work on developing their own case study. Students will receive a group grade for the final product. Groups will be supported by faculty and the TA as needed. ***The case study is due by 4:30pm on March 10. Groups will be asked to implement their case study through an in-class exercise on April 6, 18, and 27.*** The written case study is worth 70 points of your total grade for the case study and the class presentation/implementation portion is worth 30 points.
Grading: The instructor will use the point grading system, H ≥ 95, P+ = 90-94, P = 75-89, L = 65-74, and F = < 65. Please note that the university registrar only accepts grades of H/P/L/F, so the P+ is solely for your information, but will not be reflected in official grades. Final grades will be calculated using the following proportions:
- Each of the three written assignments, 20 percent.
- Class participation and class engagement, 15 percent
- Case study, 25 percent

Course Evaluation: There will be two evaluation methods. One is the University’s online course evaluation that all students are expected to complete during the two week window of time at the end of the course as listed on the UNC-CH Academic Calendar. The second is an evaluation on each individual class section sent by the TA.

Student Honor Code: The UNC honor code (https://studentconduct.unc.edu/honor-system) will be in effect in this class with respect to individual assignments. In the case of group assignments (i.e., case studies), students are encouraged to work together. If you have questions about appropriate behavior regarding the honor code, check with the instructor.

Important Note on Special Accommodations: If you need any special accommodation for an assignment or other course activity, you must be registered with UNC Accessibility Resources and Services (http://accessibility.unc.edu/), who will then provide me with an official letter.

Global Health Resources: The HSL public health resource librarian has assembled the following links for those who may be interested in global health:

- The Global Health guide http://guides.lib.unc.edu/globalhealthtoolkit offers quick and easy access to websites, journal articles, electronic books and other research materials on a wide range of global health topics.

- Global Health Data http://guides.lib.unc.edu/global_health_data helps you find data and statistics fast. They have compiled a list of reputable sources to help you add evidence to your global research.

- Global Health Internships and Service Opportunities http://guides.lib.unc.edu/GlobalOpportunities pulls together campus resources, directories of internships and specific programs for a full menu of global experiences.

- If you have additions or comments for these pages, please email hslglobal@unc.edu.
Module 1: Perinatal, Child, and Adolescent Health Overview

January 12 (TH): Course Introduction and Life Course Theory Exercise and Discussion (Ringel-Kulka)
   1. Review course syllabus and documents and come to class with questions
   2. Review life course materials from last semester

January 16: Martin Luther King Jr. Day

January 17 (T): Cesarean delivery: a lesson in moderation (Martin)
   1. Review clinical indications for cesarean section, its procedural steps, common intra and post-operative complications
   2. Examine geographical differences in the prevalence of cesarean section and potential explanations for these reasons
   3. Appreciate the complexity in balancing the use of cesarean section as an intervention to reduce maternal/neonatal morbidity/mortality and consequences of its overuse

January 19 (TH): Preconception Health and Wellness: An Intergenerational Approach to Maternal and Child Health (Verbiest)
   1. Describe the importance of preconception health in improving birth outcomes
   2. Describe strategies underway across the US to advance preconception health
   3. Discuss the importance of equity and reproductive justice to this movement

January 24 (T): Prenatal Care: Traditions and Innovations (Moos)
   1. Review the history and efficacy of prenatal care
   2. Compare and contrast the dominant model of prenatal care in the US with other approaches nationally and internationally
   3. Discuss challenges in altering standard approaches to prenatal care

January 26 (TH): Newborn Screening (Shanahan)
   1. Review the history of newborn screening
   2. Discuss current newborn screening programs and practices, including expanded newborn screening
   3. Examine the ethical, legal, and social implications of expanding newborn screening

January 31 (T) CBPR in MCH (Ringel-Kulka)
   1. Identify CBPR principles
   2. Understand the process of CBPR in MCH with breastfeeding as an example
   3. Recognize the strengths and challenges of CPBR as a tool to improve health disparity
February 2 (TH): Vaccines (Nemeyer)
1. History of vaccine development
2. Basic immunology underlying vaccines
3. Impact of vaccination on disease incidence/prevalence
4. Funding for vaccines in US
5. Mechanism for enforcing vaccination policies in US
6. Evidence for vaccine safety and efficacy

February 3 (F): Paper 1 due by 4:30pm

February 7 (T): Infectious and Non-Infectious Diseases in Children Under-Five (Singh)
1. Understand the role of infectious and non-infectious diseases as contributors to global under-five mortality
2. Analyze trends in the contribution of infectious and non-infectious diseases to global under-five mortality
3. Gain knowledge of programmatic approaches to improve health outcomes for children under-five

February 9 (TH): Children and Youth with Special Health Care Needs, their Families and Title V (Margolis)
1. Examine different ways to measure the CYSHCN population and appreciate the complexity
2. Understand the potential impact of the Affordable Care Act (ACA) on the population of CYSHCN
3. Explore state/federal relationships with respect to where responsibility for this population resides

February 14 (T): Adolescent Health (Ringel-Kulka)
1. Review health issues affecting adolescents
2. Get familiar with the guidelines for adolescents preventive services
3. Recognize and discuss public health services for adolescents

February 16 (TH): Adolescent Sexuality and Pregnancy (Halpern)
1. Analyze the context and challenges of research on adolescence and adolescent sexuality
2. Analyze contributors to sexual behavior patterns
3. Appraise trends in adolescent pregnancy and childbearing in the United States, and compare across countries

February 21 (T): Class discussion

**Module 2: Special Topics in MCH**

February 23 (TH): Health Advocacy in a Challenging Environment (Sotak)
1. Provide students with an overview of state government bodies and procedures in order to lay the groundwork for successful advocacy efforts.
2. Share general principles of community organizing, lobbying / advocacy, and coalition
building that can ultimately lead to policy change and improved health outcomes for women and children.

3. Discuss the current national and state context for women and children's health policy and what that means for advocates.

February 28 (T): Under nutrition and Malnutrition (Flax)
   1. To describe the extent of the problem of child undernutrition globally
   2. To discuss the causes and consequences of child undernutrition
   3. To review examples of interventions for reducing child undernutrition

March 2 (TH): Early Childhood Obesity and Policy (Wasser)
   1. Outline the determinants of childhood obesity using the socio-ecological framework
   2. Present examples of evidence-based behavioral interventions and/or social policies occurring at different levels of the socio-ecological framework

March 3 (F): Paper 2 due by 4:30pm

March 7 (T): Discussion (Ringel-Kulka/Gray)

March 9 (TH) An introduction to sexual and gender minority health with a case study of tobacco use disparities (Lee)
   1. Define sexual orientation and gender identity
   2. Analyze causes of LGBT disparities at multiple levels (e.g., family, healthcare, school, neighborhood, media)
   3. Formulate intervention points at multiple levels (e.g., family, healthcare, school, neighborhood, media) to promote LGBT health
   4. Appraise the role of public health advocacy and policy change in reducing LGBT health disparities

March 10 (F): Case Study due by 4:30pm

March 13 – 17 Spring Break

March 21 (T) mHealth (Agarwal)
   1. Describe the possible applications of mobile tools in delivery of maternal and child healthcare
   2. Explain potential benefits and limitations of mHealth in MCH, especially in low and middle income countries
   3. Examine the incremental value of using mHealth strategies in MCH program
   4. Formulate thinking around use of evidence-based mHealth strategies and best practices in MCH program planning, especially in LMICs

March 23 (TH) ACA/CHIP/Medicaid and Potential Changes (Kotch)
Module 3: Injury and Violence in MCH

March 28 (T) Introduction to Injury & Injury Exercise (Kotch/Ringel-Kulka)

March 30 (TH) Unintentional Injury (Ringel-Kulka)

April 4 (T) Mental Health (Cuddeback)

April 6 (TH): Case Study Exercise Presentation #1

April 11 (TH) Child Maltreatment/Abuse & Neglect (Shanahan)

April 13 (T): Global Violence Against Women (Bloom)
   1. Historical context and definitions of GBV
   2. Types of GBV & intersection with RH
   3. IPV patterns & risk factors
   4. Areas we want to measure

April 14 (F): Paper 3 due by 4:30pm

April 18 (T): Case Study Exercise Presentation #2

April 20 (TH): Children in Complex Emergencies (McClain and Al-Gaaf)

April 25 (T): Responding to the Needs of Orphans as a Result of the AIDS Crisis: A Malawi Case Study (Vitaglione)
   1. To consider how to establish a hierarchy of needs in dealing with an orphan population.
   2. To consider how to evaluate interventions for orphan-based programs

April 27 (T): Case Study Exercise Presentation #3 and Course Wrap-Up

May 2 (T): Office hours

May 4 (TH): Office hours