

**DEPARTMENT OF HEALTH POLICY AND MANAGEMENT
GILLINGS SCHOOL OF GLOBAL PUBLIC HEALTH
UNIVERSITY OF NORTH CAROLINA**

COURSE: HPM 751, Dental Public Health Practice

INSTRUCTOR: B. Alex White DDS (919-445-9374) E-mail: alex_white @unc.edu

TIME: Tuesdays, 5-8 pm

PLACE: McGavran-Greenberg 1101-F (Health Policy and Management Conference Room)

I. COURSE DESCRIPTION

Dentistry has a rich tradition in the promotion of oral health and prevention of oral diseases. Research begun in the mid-1940's has resulted in many prevention measures that can be used safely and effectively by individuals, health care providers and the community. This course will review the evidence of effectiveness for these major methods, with an emphasis on community interventions available to the public health practitioner. It also will concentrate on major systematic reviews and resulting recommendations of organizations such as the Centers for Disease Control and Prevention and the Task Force on Community Preventive Services.

This course will use a problem-based approach to learning how to evaluate information for use in dental public health decision making. Several recent preventive dentistry documents will be reviewed and discussed, and key issues identified. Students will convert these issues or others that they might have faced in everyday clinical or public health practice into questions that need to be answered in order to improve public health practice. Then they will search the literature for the best evidence to answer these questions, critically appraise the evidence for its validity, impact and applicability, and provide their best answer to the particular question. Findings will be presented in a 10-page paper and presented at the end of the semester.

II. SPECIFIC COURSE OBJECTIVES

The basic objectives of this course are to:

- develop a knowledge base for community-based methods available for the promotion of oral health and the prevention of common oral conditions.
- develop an understanding of the evidence-based practice movement in dental public health and how it can improve the provision of oral health promotion and disease preventive services.
- develop skills in evidence based practice including efficient literature searching and appraising literature (e.g., application of formal rules of evidence).

III. COURSE MATERIALS

Required Readings

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Journal Articles and Reports: Most readings and materials for the class are accessible in sakai or through electronic journals available through the Health Sciences Library. I have posted files of other assigned essential readings that are not available in electronic form on Blackboard. If you have difficulty accessing assigned materials, please contact me.

Suggested Text: Background reading for public health interventions can be done using the following:

- Burt BA, Eklund SA. *Dentistry, Dental Practice, and the Community*. 6th Edition. Philadelphia: WB Saunders, 2005.
- Hackshaw A et al. *Evidence-based Dentistry: an Introduction*. Wiley-Blackwell: 2006.

Other Suggested Readings

In the first few weeks you will conduct an evaluation of two different systematic reviews. These exercises will help you learn the steps and methods necessary to conduct a review and make recommendations based on the available evidence. As you study the other major systematic reviews selected for the semester, you also will be learning about the methods used in conducting these reviews. But you also should do some additional reading to master the steps in a systematic review that will be necessary for completion of the assigned semester project. Several sources are available that provide a description of methods to be used in conducting these reviews. Several of the more common are listed in the write-up for the semester project. However, the method used to do reviews usually depends on whether the intervention has a clinical or community focus. A number of other publications can provide useful background reading. Only a few of these are referenced here, and none are required reading. The documents referenced here can be useful if you have a question about the benefits or risks associated with a particular dental public health intervention.

- Proceedings of NIH Consensus Statement Conference. *Diagnosis and Management of Dental Caries Throughout Life*. J Dent Educ October 2001. <http://www.nidcr.nih.gov/news/CONSENSUS/Agenda.htm>
- *Topical Fluoride Recommendations for High-risk Children: Development of a Decision Support Matrix*. Recommendations from MCHB Expert Panel. Washington (DC): Maternal and Child Health Bureau, Administration for Children and Families, U.S. Department of Health & Human Services; 2007. <http://www.ws-ohc.org/documents/TopicalFluorideRpt.pdf>
- DH/British Association for the Study of Community Dentistry. *Delivering Better Oral Health: An evidence-based toolkit for prevention*. National Health Service, 2007. <http://www.avon.nhs.uk/dental/publications/delivering%20better%20oral%20health.pdf>
- Federal-Provincial-Territorial Committee on Drinking Water. *Fluoride in Drinking Water*. Health Canada, 2009. http://www.hc-sc.gc.ca/ewh-semt/alt_formats/hecs-sesc/pdf/consult/_2009/fluoride-fluorure/consult_fluor_water-eau-eng.pdf

IV. COURSE REQUIREMENTS

Overview: The requirements for the course consist of readings each week and completion of assigned exercises for that particular class. A systematic review on a topic of your choosing also will be required.

CASP Exercises: To develop review skills, we will use the Critical Appraisal Skills Programme (CASP) to evaluate two systematic reviews. The CASP forms are to be completed and posted in sakai, but they will not be graded. CASP forms are available at the following URL:
http://www.cfpc.ca/local/files/CME/Pearls/CA_Worksheet_3.pdf

Class Sessions: We will study three major systematic reviews this semester that address the benefits and risks associated with major community, professional and individual prevention methods (i.e., York Fluoridation Report, CDC Fluoride Report, Guide to Community Preventive Services). These three reports will be covered over nine classes. Several questions that highlight points for discussion will be distributed at least one week before class and your answers posted on sakai.

Systematic Review: The semester project consists of a review of the literature using methods proposed for systematic reviews. You are to identify a specific question that needs review, prepare a 10-page paper and make a class presentation on the selected topic. Recent systematic reviews and those covered in class raise important questions that need review [Details provided in handout].

V. COURSE EVALUATIONS

The Department of Health Policy and Management is participating in the Carolina Course Evaluation System (CES), the university's online course evaluation tool, enabled at the end of each semester. Your responses will be anonymous, with feedback provided in the aggregate; open-ended comments will be shared with instructors, but not identified with individual students. Your participation in CES is a course requirement, as providing constructive feedback is a professional expectation. Such feedback is critical to improving the quality of our courses, as well as providing input to the assessment of your instructors. You will be provided with an email at the end of the semester providing the URL to access the evaluations forms, and will be given a time-limited window of about a week to provide your responses.

Grade Components

Component	% of Grade
Class participation including attendance	30%
Leading class discussion	40%
Semester project	30%
Total	100%

Grading Scale

95 or above (H)

90-94 (H-)

85-89 (P+)

80-84 (P)

75-79 (P-)

70-74 (L+)

65-69 (L)

60-64 (L-)

Below 60 (F)

V. COURSE SCHEDULE

Session # (Week)	Topic	References
I. THE SCIENCE OF PREVENTION		
1 (Jan 17)	Course introduction and overview Approaches to prevention and its value to the public's health What is evidence-based practice?	Duke Course UNC-CH Course Duke Tutorial on EBM UNC-CH Tutorial on EBD Kohatsu et al., 2004 Brownson et al., 2009 Ismail & Bader, 2004
II. METHODS FOR COLLATING EVIDENCE		
2 (January 24)	Methods for conducting evidence-based reviews Practice in Evaluating Systematic Reviews Effectiveness of Sealants in Managing Dental Caries	Margalio & Chung, 2007 Richards D., 2010 Klassen et al., 1998 Jadad et al., 1998 Moher et al., 1998 Oxman et al., 1994 Griffin et al., 2008 Gooch BF, et al., 2009
3 (January 31)	Fluoride Supplements: Caries and Fluorosis	Ismail & Hasson, 2008
III. EVIDENCE-BASED REPORTS ON PREVENTION OF ORAL DISEASES		
4 (February 7) 5 (February 14) 6 (February 21)	Formulate Review Question York Water Fluoridation Report Define Search Strategy for Review York Water Fluoridation Report (Con't)	McDonagh et al., 2000
7 (February 28) 8 (March 7) 9 (March 21) 10 (March 28)	CDC Fluoride Report Plan for Data Abstraction for Review CDC Fluoride Report (Con't) CDC Fluoride Report (Con't)	CDC Expert Panel 2001
11 (April 4) 12 (April 11) 13 (April 18)	Guide to Community Preventive Services Assemble Information and Analyze Results for Review Guide to Community Preventive Service (Con't)	Community Guide Task Force, 2002
IV. CLASS PRESENTATIONS OF SYSTEMATIC REVIEW ON PREVENTION OF ORAL DISEASES		
14 (April 25)	Class Presentation of Semester Project	