

### Assignment 3: A Life Course Perspective on Chronic Illness

There are two parts to this assignment: (1) Individual Papers and (2) Group Presentations.

Each student will work individually in Part A. This will be used to build the group presentation in Part B. The class is divided into groups of approximately 6-8 students, and each group is assigned a chronic condition that has been linked, in part, to fetal environment. The chronic conditions include the following: coronary artery disease, hypertension, type-2 diabetes, chronic bronchitis, asthma, breast cancer, prostate cancer, obesity, cognition, stroke

Overall Content Objectives: (1) Using the life course perspective, effectively communicate how fetal environment and contemporary risk factors may contribute to the development of the chronic condition; (2) Illustrate how the findings from longitudinal research may result in a different understanding of these conditions than those obtained from cross-sectional research.

Overall Skill Objectives: (1) Perform a critical review of the literature; (2) Develop a professional presentation; (3) Share the knowledge and perspectives gained with the remainder of the class through a professional oral presentation.

Each member of the group should carefully read the following assigned reading material. These readings provide a background on the life course perspective.

Ben-Shlomo, Y and Kuh, D (2002). A life course approach to chronic disease epidemiology: conceptual models, empirical challenges and interdisciplinary perspectives. Int J Epidemiol 31: 285-293.

Halfon, N and Hochstein, M (2002). Life course health development: and integrated framework for developing health, policy and research. Milbank Quarterly 80: 433-479.

Lynch, J. and Smith, GD (2005). A life course approach to chronic disease epidemiology. Annual Reviews of Public Health 26: 1-35.

Next, the group should begin this assignment by searching for publications that are based on longitudinal, retrospective, or cross-sectional studies designed to show how the fetal environment and/or contemporary risk factors may contribute to the development of the chronic condition.

The group should identify a representative sample of longitudinal and cross-sectional studies that allow you to effectively communicate how both the fetal environment and contemporary risk factors may contribute to the development of the chronic condition, using the life course perspective. If there are developing-country studies available for the condition, be sure to include them.

After conducting a thorough review of the literature, the group should select the key publications, which will be used for the individual paper assignments in Part A and for building the group PowerPoint presentation in Part B.

Grading Framework: Each member of the group will receive the same grade for Part B. Evaluation of the PowerPoint presentation will serve as the remaining 10% of each student's total grade for the course. Elements in grading are given below:

- **Abstract:** clearly highlights major points of the presentation
- **Introduction/Background and Objective :** quality and completeness of presentation of natural history and magnitude; clearly stated objective
- **Methods:** thoughtful review of the literature that demonstrates a representative sample of longitudinal and cross-sectional studies
- **Results:** discussion of strengths and weaknesses of key publications
- **Conclusions and Discussion:** logical flow of conclusions and discussion from results
- **Organization and Presentation of Slides:** clarity of ideas, visual layout (easy to read/understand)
- **Oral Presentation:** main idea of slides clearly conveyed within given timeframe

## Part A: Individual Papers

Each person in the group will submit an individual paper pertaining to the final PowerPoint presentation. The papers are described below:

**Natural history:** one group member will be responsible for producing an individual paper discussing the prevailing view of the life course of the condition. (This is often called the "natural history" of the disease process and can be found in standard medical textbooks.) The discussion should evaluate whether this standard or prevailing view of the natural history of the condition derives from longitudinal or cross-sectional studies. This may be used to build the Introduction/Background section of the PowerPoint presentation.

**Magnitude of the health problem:** one group member will be responsible for producing an individual paper discussing the magnitude of the health problem in the United States (or other country) and its consequences—e.g., disability caused by the chronic disease, health care costs, etc. This, too, may be used to build the Introduction/Background section of the PowerPoint presentation.

**Review of a key publication:** each of the remaining group members will be responsible for producing an individual paper that reviews one of the key publications selected by the group. Each review paper should summarize a publication, including the following:

- Rationale for the study
- The study question
- Study methodology/design
- Results

Finally, there should be a discussion of how this paper adds to the body of knowledge on how life course events contribute to the burden of the chronic disease. Relevant citations of the publication under review by later papers should be incorporated in the discussion, if these are available. You can usually find these citations using PUBMED or other databases. You should use these individual review papers as the basis for the Results and Conclusions sections of the group PowerPoint presentation.

## Part B: Group PowerPoint Presentation

The group will work together to produce a PowerPoint presentation on the life course perspective of its assigned chronic disease. Please include the following in the PowerPoint presentation:

- **Abstract:** give a brief summary of the project, highlighting the major focus of the PowerPoint presentation.
- **Background:** provide a brief background of the natural history of the condition and describe the magnitude of the health problem in the United States (or other country).
- **Objective:** clearly state the objective of the presentation.
- **Methods:** describe the methodology used to search for and select the key publications.
- **Results:** show evidence for how the risks for the condition occur over the entire life span, using the reviews of the key publications selected by the group. Draw inferences about the relative contribution of early influences and contemporary risk factors.
- **Conclusions:** based on the literature reviews, the group is to develop its own understanding of the life course of the condition. Come to some conclusions about the strengths and weaknesses of the longitudinal versus the cross-sectional approaches.
- **Discussion:** briefly discuss the implication of your results and also the limitation of the conclusions reached.
- **References:** provide a list of references used to research and create the PowerPoint. (References should be on separate slides but must not be included in the oral PowerPoint presentation). Please remember to use appropriate and consistent citation style.