Conceptual Framework Assignments

The general aim of this course is to teach you to frame public health issues using a multilevel life course perspective. The course lectures, readings, and discussion are, of course, central to this aim. However, hands-on experience in applying these concepts is critical; without this experience, the material will remain abstract and its usefulness may be unclear.

This set of assignments is designed to make the multilevel, life course perspective more concrete and to highlight its value for research and practice. You will identify an appropriate outcome, review the literature about the determinants of this outcome, and build a conceptual framework organizing this information using a multilevel life course perspective. Although you will hand in three separate assignments, they are parts of a whole; we have broken the whole into steps so that you will be working on your framework throughout the class and can receive feedback as you work.

Assignments will be docked half a grade for each day that they are late (a day late is defined as any time within the 24 hours after the assignment is due).

The specific assignments are as follows, with the percentage that each contributes to students’ final grades in parentheses.

Topic for Conceptual Framework

The first step is to select an appropriate health outcome. Turn in a short paragraph stating the health outcome for which you will develop a conceptual framework. You may choose an outcome in which you are already interested or use this assignment as an opportunity to explore a new topic. The outcome must meet the following guidelines.

- **It must be a health outcome.** The life course perspective entails a broad view of “health,” so issues from school achievement to malaria to prostate cancer are appropriate.
  
  - Even if your interest is in programs or policy, your conceptual framework needs to focus on a health outcome. Fundamentally, programs and policies attempt to manipulate the determinants of an outcome, so understanding determinants is central to designing programs and policy. Assessing the effects of a program or policy is not appropriate for this assignment.
  
  - Similarly, if your interest is in the relationship between a particular determinant and an outcome (e.g. sex education and likelihood of using contraception, early marriage, and vaginal fistula); you must focus on the outcome and model all its determinants, not just the one you are interested in. This will show where your determinant of interest fits in the overall process producing the outcome across settings/populations.

- **It must be a public health problem.** To be a public health problem, an outcome must have high prevalence in the population. But simply because an issue is highly prevalent does not make it a public health problem. To use an absurd example, dandruff is a highly prevalent problem, but one would be hard
pressed to say that it is a public health problem. Thus to rise to the level of a public health problem, the issue must have an impact in terms of morbidity or mortality. Perhaps the impact is measured in hospital stay duration or perhaps days of work lost. But there is a population (not just an individual) level impact to the condition. Finally, there must be a plausible intervention at a population level. If interventions to address an outcome are directed to individuals (e.g. psychotherapy, medication, surgery, remedial education, etc.) then the outcome is not a public health problem. Remember that saying an outcome is not a public health problem does not mean it is unimportant. Many issues that are not appropriately addressed by public health are highly relevant in clinical settings and/or have a significant impact on individuals and so should be addressed by other means.

• **It must be appropriate to frame in a multilevel, life course perspective.** Many outcomes of interest in public health are usefully considered in a multilevel, life course framework, but some may not be amenable to this approach.
  
  • By **multilevel**, we mean that your conceptual framework takes into account the biological, psychological, individual/behavioral, familial, community, etc. factors that contribute to the public health problem.

  • By **life course**, we mean that your conceptual framework includes a time dimension. That is, your framework should identify points in the life course (e.g., early childhood, adolescence) when particular factors predispose or protect individuals from a subsequent adverse outcome. Your framework should also address the ways in which factors might interact with time to influence the outcome. For example, does an exposure only influence an outcome if it occurs at a particular developmental stage (critical period)? Does an experience influence the outcome only if it is prolonged or results in certain consequences (accumulation, pathways)?

• **It must refer to general, not specific, populations.** Your conceptual framework should apply to all, or at least most, settings and populations in which the outcome you are interested in occurs. If you want to develop a framework that applies to only one setting or population (e.g. the Netherlands, Tanzania, minority youth in the US, rural women in Peru) you must make a compelling argument that this setting or population is so different that the entire process leading to the outcome is different. This is not the same thing as saying that particular determinants are more or less important in that setting or population or that the values of determinants (e.g. income is low, access to healthcare is restricted) are different. One of the uses of a conceptual framework is to highlight the factors that differentiate outcomes across settings (because either the factors differ or their relationship to health differs) and that cannot be done if a framework applies to a single setting. In other words, thinking generally helps you to identify what is specific to your setting.

**Annotated Draft of Conceptual Framework (15%)**

**Participation in Conceptual Framework Workshop (5%)**

The second step in the assignment is to review what is known about the determinants of your outcome and to organize this information into a draft conceptual framework diagram. On your diagram you must indicate the references that support or suggest each of the linkages you show. You will turn in your draft framework accompanied by your reference list (bibliography). You will receive comments from course faculty on your draft. If you wish, you have the opportunity to receive comments on your framework from a classmate and comment on her or his framework in turn.

Follow these guidelines as you prepare your draft framework.

• **Remember you must bring a multilevel, life course perspective to bear on your topic.** You must consider
the multiple levels of determinants involved in your outcome, when they occur, and how they might interact with time.

- Think about your outcome in developmental terms – as the reflection of an underlying trajectory. This is easiest with chronic diseases that develop slowly over time and may be subclinical biological. But for outcomes that appear to develop more quickly, what may be important is the chain of circumstances or risks that eventually led to the outcome. In other words, conceptualize the process and pathways that lead to an outcome, not just sets of determinants.

- You may find it helpful to begin by arraying factors that you read about in your literature review on a grid, with “level” (biological, psychological, social, etc.) on one axis and time (life course stages as appropriate) on the other. This is a simple but surprisingly helpful way of organizing your thoughts.

- You may also find it helpful to consider the proximate causes of your outcome. Many of the factors in your framework will be “distal” in the sense that they are somewhat removed in time and space from the outcome. In contrast, “proximate” determinants are factors that are the immediate cause of the outcome. These often, but not always, reflect a physiological process. For example, you could conceptualize the proximate causes of maternal mortality as pregnancy, birth complications, and lack of skilled care (i.e., the “three delays”). Then you’d build your framework focusing on the various factors over the life course that placed a woman in this situation (including circumstances such as her age and parity, which change her risks of complications, given pregnancy). Conceptualizing the proximate determinants of your outcome can help you focus your framework and prevent it from being just a list of risk factors.

- You must justify the factors and linkages in your framework with references to the scientific literature on your outcome. If the literature suggests a particular link but it has not been tested, you can include that and reference the sources that suggest the link. If a link is suggested by theory but has not been tested, include the theoretical reference (these can be links that you think of or emerge from your experience working on the issue and then support with theoretical reasoning).

- Your review of the literature must include the major multilevel factors leading to the outcome over the life course. Those of you who select topics with extensive literatures will need to use your judgment to decide if you have covered the literature adequately. Those of you who chose topics with smaller literatures may need to search more widely (e.g., using services besides PubMed) or may need to rely more on the theoretical or practice-based literatures. Be sure to start with the most recent literature, which will reflect the current state of knowledge. Although review articles are inappropriate for most class papers, for this assignment you may look for review articles to guide your search. Whether a conceptual framework covers the literature adequately is a substantive judgment that does not directly translate into numbers of references. However, 10 references are probably too few and 100 references are probably too many, unless you have already worked extensively on the topic.

- You may choose to model your conceptual framework on another one or you can build your own. Some of you may come across conceptual frameworks for your topic in the course of your literature review, especially in review articles. You may use these as sources, but your conceptual framework must be substantially different. You may also model your framework on one developed for a different outcome if you think it meets your needs, but you must cite the original in your reference list.

- This product is a draft of your framework. We expect you to have made substantial progress on your conceptual framework and accompanying literature review for this assignment. However, we also expect that you will be have questions, be puzzling over pathways and linkages, and thinking about various ways of representing your thoughts – and that your final version might be quite different.
• The simplest way to include references in your diagram is to use a numbered format for your reference list and simply place the numbers in the appropriate places on the diagram. For example, if you show a link between childhood poverty and your outcome, adult CVD, in your framework and you have three references about this link numbered 2, 7 and 11, just place “2, 7, 11” next to the line linking childhood SES and adult CVD on your framework. Please use a consistent reference format; several standard formats, for example the one used by the American Journal of Public Health and the International Journal of Epidemiology, are numbered.

• Hand-written frameworks will not be accepted for any of the assignments. Although many (or most) of you will begin by hand drawing your frameworks, the versions you hand in must be drawn using computer software like Word or PowerPoint. Regardless of the program you use for drawing, you must submit your framework as a single PDF document.

Completed Conceptual Framework with Accompanying Description

You will receive feedback on your draft framework from the course instructors and perhaps from a fellow student. Your ideas will develop and you may find additional references. You may have insights (and inspirations!) about how to elaborate your model or think about your topic. The last assignment in this series is to prepare a final version of your conceptual framework diagram and to describe it in no more than 7 pages of text. In this version, you will not reference the literature on the diagram itself, but in the write-up describing it. This is the way one would present a conceptual framework in a proposal or journal article. You need not spend more than a paragraph introducing your topic or your rationale for choosing it. The text should describe the process you depict in your diagram in words, elaborating and explaining as necessary.

The text may be any length but must not exceed 7 pages. Use 1” margins, a font no smaller than 12 point Times Roman and doublespace the text. Your reference list and diagram are not included in this page count. As in the first draft, use a consistent reference format (the same is fine). The text and framework must be submitted as a single PDF document.