**Scope of activities**

1. Conduct a thorough literature review to identify the specific variables or contributing risk/protective factors that influence the risk behavior at each level of the SEM (individual, interpersonal, community and societal level; Identify and highlight key theoretical constructs (attitude, belief, self-efficacy, etc.)
2. Create a conceptual diagram reflecting the factors that influence the risk behavior.
3. Write a narrative up to 300 words that clarifies the linkages included in the conceptual framework. **Identify those variables/constructs that would be most suitable as targets for an intervention and justify your selection**.
4. Literature review should include a minimum of 3 references per level of SEM

**Process/Delegating Work: Use Google Docs to work on one document online**

* Each student is responsible for the analysis and development of the conceptual framework of a specific level of the SEM. Selection of the level will be a group decision (for example, student A will be responsible for Individual level; student B will be responsible for Interpersonal level; student C, Community level; student D, Societal and student E, Multi-level) **NOTE: INTERPERSONAL, COMMUNITY or MULTI-LEVEL CAN HAVE MORE THAN ONE STUDENT ASSIGNED. These are sometimes the most difficult tasks. Always assign one person to proofread!**
* The diagram should depict the links and relationships that variable/constructs/factors may have on each other. Use shapes, boxes, arrows (to indicate relationship and direction) and lines to pull together your diagram. The diagram should fit on one page. **(Note that variables/constructs/factors are used interchangeably in this course.)**
* Make sure you specify the direction of the influence of the variables. For example, don’t just say “knowledge”, but “lack of knowledge”, which provides a more accurate picture of the problem at hand.
* A list of example of variables at the four levels is provided on page 2.
1. **Finish with a Multilevel framework:** This framework will synthesize and combine the variables/ linkages that were found at the individual, interpersonal, community and societal levels. Since this diagram or framework will guide the development of your intervention and your education/communication message, it is important that you include the most prominent variables that influence the risk behavior.

Write a 500 word summary/narrative that explains the linkages within and across the levels of the multilevel conceptual framework highlighting the most salient factors. Document your sources.

* To organize and present your findings, you MUST follow the format provided here.
* Submit the assignment in one single document, with a cover page, a title that pertinently reflects your project (must specify the risk behavior, target audience and geographic area), and student names.
* See the syllabus for writing requirements and source citations

**PLEASE FOLLOW THE FOLLOWING ASSIGNMENT FORMAT**

1. Health Problem you are addressing
2. Behavioral Risk Factor (BRF)
3. Target Audience
4. Using the key BRF as your point of reference (because this is the health behavior you want to change in your audience)
5. Depending on your risk behavior, some of the factors listed below may not be relevant or may overlap across levels. Use your good judgment to present them.
6. **Individual Level Factors**:
* Such as knowledge, skills, attitude, beliefs, perceived severity, perceived benefits, perceived barriers, perceived behavioral control, self efficacy, etc*.*
* Age, gender, race, ethnic background, education, geographic location, genetic, etc.

**Note**: *Remember that they are risk factors but also protective factors. Also you need to precise the direction of the influence (decrease or increase).*

1. **Interpersonal Level Factors**
* Parents, peers, mentors
* Family or peer norms/pressure
* Social network, social groups
* Virtual networks
1. **Community Level Factors**
* Neighborhood, living conditions
* Local organization policies
* Physical structures such as parks, green space, lightening, etc.
* Social structures such as norms, values, social capital
* Access to care
1. **Societal Level Factors**
* Government and state legislations that address the risk behavior
* Social policies (health insurance, transportation)
* Institutions (environment where these policies take place such as work environment, school environment, housing etc.)
* Social marketing

1. **Multilevel Framework**

**The following pages provide an example of factors and how to describe them. Please follow the presentation format. Separate each level using “page break”.**

**Title: xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx**

**Health Problem**

xxxxxx

**Behavioral Risk Factor (BRF)**

xxxxxx

**Target Audience**

 xxxxx

1. **INDIVIDUAL FACTORS[[1]](#footnote-1) Student’s name: CXX**
* **Gender**
	+ Women are less likely to wear helmets than men in Vietnam (Hung, 2008; Harlos, 1998; Hurt, 1991).
* **Attitude**
	+ Lack of motivation to avoid pregnancy (Rivera et al., 2007)
* **Self-efficacy**
	+ Inability to ask their partners to use a condom, fear to communicate with partner; belief that he or she is unable to practice safe sex. (Mikawa et al., 1992)
* **Education**
	+ Less educated adolescent were more likely to delay or not access prenatal care (Deibec et al., 2010).
* **Geographic location**
	+ Adolescents who live in rural neighborhoods are less likely to seek adequate prenatal care than adolescents from urban neighborhoods (Geronimus, 1986).
* **Personal experience**
	+ Previous negative interactions with health providers were barriers to use prenatal care (Sword, 1999)

And so on…

 **CONCEPTUAL FRAMEWORK FOR INDIVIDUAL FACTORS**

LUNG CANCER

 SMOKING

variable

Low level of education

Low perception of susceptibility

Variable

Variable

**NARRATIVE (300 words)**

**References:**

 Debiec, K.E., Paul, K.J., Mitchell, C.M., Hitti, J.E. (2010). Inadequate Prenatal care and Risk of Preterm Delivery Among Adolescents: A Retrospective Study Over 10 Years. *American Journal of Obstetric Gynecology,* 203:122.e1-6.

Aikins, M., Pickering, H., & Greenwood, B. (1994). Attitudes to malaria, traditional practices and bed nets (mosquito nets) as vector control measures: a comparative study in five west African countries. *Journal of Tropical Medicine and Hygiene* *97*(2) 81-6.

Alaii, J., Van Den Borne, H., Kacher, S., Shelley, K., Mwenesi, H., Vulule, J., Hawley, W., Nahlen, B., & Howard, P. (2003). Community reactions to the introduction of Permethrin-treated bed nets for malaria control during a randomized controlled trial in western Kenya. *The American Journal of Tropical Medicine and Hygiene.* 68 (S4). 128-13

1. **INTERPERSONAL FACTORS Student’s name: WWX**
* **Parents/ Family**
* Parental involvement acted as a protective factor towards helmet use. (Fuentes, 2010; Bianco, 2005; Hung, 2008; Germeni, 2009; Berg, 2001)
* **Peer norms**
	+ Helmet use was significantly higher when another family member or close friends also always wore a helmet. (Bianco, 2005; Thompson, 2002; Pileggi, 2006; Lajunen, 2001)
* **Social group**
	+ Adolescents with lower scores in social supports are less likely to engage in physical activity (Chen 2007)
* **Social network**
	+ Women typically gain health knowledge from other women. Women in contact with other women are more likely to use bednets. (Howard et al., 2010).

**and so on…..**

**CONCEPTUAL FRAMEWORK FOR INTERPERSONAL FACTORS**

Health outcome

 Risk Behavior

variable

Peer pressure….

Family members smoke

Variable

Variable

Variable

Variable

**NARRATIVE ( 300 words)**

**Reference**s

Aikins, M., Pickering, H., & Greenwood, B. (1994). Attitudes to malaria, traditional practices and bed nets (mosquito nets) as vector control measures: a comparative study in five west African countries. *Journal of Tropical Medicine and Hygiene* *97*(2) 81-6.

Alaii, J., Van Den Borne, H., Kacher, S., Shelley, K., Mwenesi, H., Vulule, J., Hawley, W., Nahlen, B., & Howard, P. (2003). Community reactions to the introduction of Permethrin-treated bed nets for malaria control during a randomized controlled trial in western Kenya. *The American Journal of Tropical Medicine and Hygiene.* 68 (S4). 128-136

1. **COMMUNITY FACTORS** **Student’s name: WXX**
* **Community health perception**
	+ The Djoula term that often refers to malaria, *soumaya*, leads to misconceptions about the disease (Okrah, Traore, Pale, Sommerfeld, & Müller, 2002; Toé et al., 2009).
* **Cultural beliefs**
	+ B*ana* in Djoula, has a non-medical and spiritual connotation. Illnesses are believed to “catch the victim,” or *bana ye mine.* This can led to decreased use of ITNs and other medically supported preventative measures given the spiritual nature of illnesses (Sommerfeld, Sanon, Kouyaté, & Sauerborn, 2002).
* **Physical structures**
	+ The conical structure and high peaks of many of the houses make ITN installation difficult and decreases motivation for use (Baume, Reithinger, & Woldehanna, 2009).
* **Environmental exposure**
	+ High-level lead exposure during pregnancy leads to adverse birth outcomes such as low birth weight. Women exposed to lead based paint in older homes are especially vulnerable (March of Dimes, 2003).
* **Access to care**
	+ Inflexible hours, long waiting times, crowded conditions, bad reputation, intolerable care, and lack of trust were all strongly cited as significant barriers to initiating and continuing prenatal care among low income women in the U.S. (Loveland Cook et al, 1999).

And so on….

**CONCEPTUAL FRAMEWORK FOR COMMUNITY FACTORS**

LUNG CANCER

 SMOKING

variable

High level of exposure to outdoor pollution

Lack of access to care

Variable

Variable

Variable

Variable

**NARRATIVE—300 WORDS**

**References**

Aikins, M., Pickering, H., & Greenwood, B. (1994). Attitudes to malaria, traditional practices and bed nets (mosquito nets) as vector control measures: a comparative study in five west African countries. *Journal of Tropical Medicine and Hygiene* *97*(2) 81-6.

Alaii, J., Van Den Borne, H., Kacher, S., Shelley, K., Mwenesi, H., Vulule, J., Hawley, W., Nahlen, B., & Howard, P. (2003). Community reactions to the introduction of Permethrin-treated bed nets for malaria control during a randomized controlled trial in western Kenya. *The American Journal of Tropical Medicine and Hygiene.* 68 (S4). 128-1

1. **SOCIETAL FACTORS** **Student’s name: WXX**
* **Societal structural changes**
	+ Studies conducted suggest that the increasing trend of obesity in Taiwan is a result of increased urbanization and industrialization over the past few decades (Chu, N.F., 2001).
* **Distribution and social marketing**
* The type of distribution system in place can greatly impact the effectiveness of efforts to promote ITN coverage in malaria endemic areas (Bernard et al., 2009).
* Social marketing systems of distribution, in which the consumer purchases an ITN at a subsidized price, have been shown to be effective in some settings (Mathanga, Campbell, Taylor, Barlow, & Wilson, 2006).
* **Federally Funded Prenatal Care.**
	+ Access to publicly funded prenatal care is associated with increased use of prenatal care (Debiec 2010).
* **Social perception regarding gender**
	+ Male health is considered more important in the Peruvian society. The health care available to women is less than men which is a direct result in neglected TB cases, whether it be diagnosis or treatment. (Barclay, F., 2009)

**and so on….**

**CONCEPTUAL FRAMEWORK FOR SOCIETAL FACTORS**

LUNG CANCER

 SMOKING

variable

Laws which allow smoking

Social marketing campaign to promote smoking

Variable

Variable

Variable

Variable

**NARRATIVE—300 WORDS**

**References**

Aikins, M., Pickering, H., & Greenwood, B. (1994). Attitudes to malaria, traditional practices and bed nets (mosquito nets) as vector control measures: a comparative study in five west African countries. *Journal of Tropical Medicine and Hygiene* *97*(2) 81-6

1. **MULTILEVEL FRAMEWORK** **Student’s name: WXX**

**MULTI-LEVEL SUMMARY NARRATIVE HERE**

1. ***The variables listed here are provided only as examples.*** [↑](#footnote-ref-1)