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At Risk for PTSD: The Public Health Implications of Trauma

Madeline Peyton

University of San Francisco, madelinerpeyton@gmail.com

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At Risk for PTSD:
The Public Health Implications of Trauma
Summary of Fieldwork
Madeline Peyton
University of San Francisco
August 27, 2014

Abstract

The fieldwork experience is the summation of six semesters of graduate level public health training. At commencement, students are to be proficient in basic data analysis and epidemiological principles, in how environmental risks impact health, and demonstrate strong program planning, evaluation and leadership skills.

Throughout, students are encouraged to focus their academic work on an area of public health that interest them and on a problem that they hope to impact in their professional work. I continued in an area I began as an undergraduate student of medical anthropology and explored the systems that interact to influence mental health of populations. Specifically, how veterans and others exposed to trauma are at an increased risk for adverse health outcomes. This paper and my fieldwork experience reflect my intention to apply my degree in those areas after completion.

In my fieldwork, I wanted to deepen my understanding of the primary, secondary and tertiary prevention methods used in trauma and mental health for those with PTSD. For my work with Dr. Myeal Charvat, I shifted focus from traditional public health to clinical treatments for PTSD (tertiary prevention) and then to an overview of the factors associated with risk for PTSD (primary and secondary prevention). In this paper, I present those findings as well as my perspective on trauma as a public health concern. I also describe the challenges and learning objectives of my experience, and areas for future work on the topic.

At Risk for PTSD:

The Public Health Implications of Trauma

Summary of Fieldwork

Introduction

Literature on the prevalence of trauma indicates that many individuals will experience or witness a traumatic event in their lifetime. In 1995, Kessler and colleagues found that 61% of men and 51% of women experienced at least one traumatic event in their lives, and multiple traumas were common in the sample of 5,800 individuals. Exposure to trauma can cause posttraumatic stress disorder (PTSD), characterized by reliving the traumatic event, heightened neurological arousal response, and functional impairment such as distortions in mood and cognition (Diagnostical Statistical Manual, 5th Edition, 2013). Trauma exposure during childhood is also correlated with increased risk for suicide (12x), alcoholism (10x) and IV drug use (7x) among other negative health behaviors (Fellitti, 1998). In addition, other mitigating factors such as type of trauma, socioeconomic status, and coping response impact the risk of developing PTSD following a trauma (DiGangi et al. 2013).

In concert, high likelihood of experiencing trauma, risk of adverse health outcomes, and increased susceptibility in some populations requires public health researchers and practitioners to continue incorporating the latest findings into practice. Therefore, it is critical to examine the most recent literature on factors associated with the risk for developing PTSD and conditions that are associated with PTSD symptoms from a public health perspective in order to reduce poor health

effects of trauma in the population. The summation of my Master in Public Health degree, the Fieldwork Experience, was focused on incorporating this research into public health practice.

Background and Trauma Epidemiology

A traumatic event is an experience that causes physical, emotional, psychological distress or harm and is experienced as a threat to one's safety or to the stability of one's world (National Institutes of Health and the US National Library of Medicine, 2010). The health impacts of trauma are understood in terms of the incidence of posttraumatic stress disorder (PTSD) in populations who are exposed to trauma. The prevalence of PTSD in the general population varies by many factors including age, gender, and type of trauma. For example, PTSD was present in 65% of men and 46% of women who reported rape, while the overall prevalence of PTSD was estimated to be 8% (Kessler et al., 1995). Another study published in 2000 found that 40-90% of the population will experience at least one traumatic event in their lifetime and up to 20% of those individuals will develop PTSD in their lifetime (Perkonigg et al., 2000).

Trauma is also associated with adverse health outcomes other than PTSD. These include elevated risk for depression, risk for diabetes and heart disease, and risk for substance abuse (Felitti et al., 1998). The risk of developing PTSD increases with the severity and type of trauma and some studies have confirmed that there is a dose-response effect with trauma (Norris & Slone, 2013). The risk of developing PTSD given a certain type of trauma is referred to as conditional risk (Norris & Slone, 2013). Additionally, factors existing prior to trauma that have been found to

increase risk of developing PTSD (i.e. low intelligence quotient) are referred to as pretrauma risk factors (DiGhanghi et al., 2013). Broadly, dose-response, conditional risk, and pre-trauma factors all combine to inform relative risk for any individual for the development of PTSD or other health problems following trauma exposure.

Given the high likelihood of experiencing a traumatic event and the negative health outcomes associated with trauma and PTSD, research has focused on identifying factors that increase the risk of PTSD in the event of trauma. In an effort to synthesize the literature on the topic, authors DiGhanghi and colleagues found that, based on their inclusion criteria, 54 studies met the criteria for assessing factors associated with developing PTSD. The review found that six categories were predictors of PTSD: cognitive abilities, coping and response styles, personality factors, psychopathology, psychological factors, social ecological factors including poverty and social support (DiGanghi et al, 2013). In their discussion, the authors noted that the studies as a whole suggest that some predictive factors are very similar, if not the same, as symptoms of PTSD (i.e. hyperarousal), putting “people at risk for developing a condition that, definitionally, involves [the attribute]” (DiGhanghi et al., 2013). This creates circuitry between the risks and the disorder. Research that can help to distinguish symptoms from risk will benefit diagnosis and treatment.

Similar conclusions emerged from the meta-analysis by Zoladz and Diomaond in 2013. The authors reviewed literature on the behavioral and biological markers of PTSD to support future iterations of diagnostic criteria. The research they examined focused on the dose-response model of PTSD susceptibility, peri-

trauma arousal, peri-trauma cortisol levels, peri-trauma dissociation, genetic factors and PTSD susceptibility and gender and PTSD. The authors then examined behavioral abnormalities associated with PTSD including elevated behavioral and physiological measures of arousal; startle response, parasympathetic nervous system, norepinephrine and sympathetic nervous system and neuroendocrine abnormalities. Literatures on the neurobiological abnormalities of PTSD were also reviewed. The authors noted in their discussion that there are inconsistencies in the literature (i.e. increased or decreased cortisol levels in individuals with PTSD) which points to the need for a more nuanced understanding of the biological and behavioral expressions of trauma. They concluded that a review PTSD phenomenology exposes “the realization that PTSD is a disorder triggered by a psychological trauma, but grounded in the complex interplay among developmental, genetic, endocrine, immunological and neurobiological abnormalities” further complicating the distinction between potential conditional risk and trauma-induced symptom of PTSD (Zoladz & Diamond, 2013). The two reviews compliment each other in that their summaries of the vast amounts of literature on the topic both point to a need to distinguish biological and behavioral predictors from symptoms caused by trauma to treat and potentially prevent PTSD more effectively.

These findings were part of my fieldwork with Dr. Mylea Charvat, the Chief Health Officer for Partnerships for Change:

“Partnerships For Change® (PFC), a 501(c)3 non-profit organization headquartered in San Francisco, is dedicated to the promotion of sustainable development through direct humanitarian action, transforming social and economic conditions of underserved communities, globally. It is PFC’s commitment to elevate and empower individuals to reach their ultimate potential, which translates to creating strong community coalitions. Once an underserved community has identified a specific

challenge, PFC raises the funds or partners the community with its extensive network of individuals, entrepreneurs and organizations to cross the Rubicon to victory.”

The agency's commitment to empowering women led Dr. Charvat to partner with The Artemis Rising Invisible War Recovery Program (ARIWRP) as their Clinical Advisor to develop effective treatments to support survivors of military sexual trauma regain their quality of life. I did not work directly with PFC as an organization and did not have the opportunity to review their organization structure or other projects. The ARIWRP incorporated evaluation and relevant literature in their program proposal and description, but I am not authorized to describe their work in detail as it unpublished and in progress.

Implementation of work

The University of San Francisco MPH program does not require a class on public mental health, but the elective “Addressing Mental Health Issues in Public Health” grounded my public health work in detecting, understanding and reducing disparity where possible. I found many opportunities to observe and participate in mental health related work for my fieldwork experience, but chose to work with Mylea Charvat, Ph.D for her experience with the Veterans Administration and the projects she was currently focused on.

My fieldwork experience evolved into two distinct projects, each helping me achieve my overall goals for the summer of understanding the public health implications of trauma. My first project was to support the ARIWRP team in writing client and practitioner materials for the program. The second project was to build a keynote address to be given by Dr. Charvat on the risk factors for PTSD at the Sexual Assault Response Teams (SART) Summit.. During our planning session and

throughout the experience, we focused on two major learning objectives: Review the literature on risk factors associated with an increased risk for PTSD and build an overview of the findings in the literature for the SART presentation. Changes to the objectives during the fourth week are detailed in Appendix A.

The ARIWRP is a tertiary preventive measures in that it is a treatment for a diagnosis of PTSD. The program is a two-week clinical treatment program for survivors of Military Sexual Trauma (MST). The intervention is an evidence-based clinical treatment program designed to “ameliorate the psychological effects suffered by the survivors as a consequence of MST” (Artemis Rising Invisible War Recovery Program Description). The program completed three pilots in 2013 and is a traditional clinical intervention, grounded in trauma treatments used widely in clinical and psychological settings. There are three evidence-based treatments for trauma including Prolonged Exposure Therapy (PE), Eye Movement Desensitization and Reprocessing (EMDR), Cognitive Processing Therapy (CPT). Summaries of the treatments can be found in Appendix B. The team used traditional research methods and program planning, including identifying cohorts with controls and variables and measuring symptoms of PTSD with a validated scale. The team intends to continue in the Fall of 2014.

When the ARIWRP work was put on hold, Dr. Charvat and I transitioned to summarizing the risk factors for developing PTSD for the Sexual Assault Resource Teams summit. This group gathers online and in person to share materials, educate, and advocate about sexual assault and is comprised of crisis responders to sexual assault including physicians, nurses, lawyers, policy and volunteers. Dr. Charvat was

asked to give the keynote at their August 2014 conference to address the literature on known risk factors. We adjusted my goals and objectives to deliver a literature review and presentation slides on the topic.

This was extremely challenging. Thus far, the public health program had prepared me on a general level on a number of topics. This work required me to go to a level of scientific detail I had not yet. Courses in biostatistics, epidemiology, program planning, public health administration and mental health gave me the foundation to analyze and summarize the literature with Dr. Charvat's clinical guidance. Our learning agreement can be found in Appendix C.

Results and Findings

The results of the effectiveness of ARIWRP is yet to be determined, but early results were promising. As with any new treatment, gaining funding proved to be their greatest challenge. While I cannot comment on the details of the program, the model was very sound in terms of sustainability and grounded in proving effectiveness. The project was inspired by the documentary *Invisible War*, giving it immediate popular credibility, but building scientific credibility through methodical gathering of data and evaluation of findings will take time.

The presentation to the SART community was a success in many ways. First, it was a success for my fieldwork because I was able to deepen my understanding of trauma treatment and risk factors. This will support my work in the future if I am making policy recommendations or developing programs. It was also success in that the audience responded by wanting more information. As an educational tool, it succeeded in giving the participants in the conference valuable information they can

incorporate into their crisis response, but they also realized the need for more in-depth training on the topic. This is a primary prevention success in that the presentation built awareness in a population. Both projects, though, will require greater partner interaction at the next stages.

Application of results and public health significance

The literature on PTSD and trauma is vast and already applied successfully in prevention and intervention programs that use trauma-informed practice, such as cognitive resilience training to prevent PTSD and exposure based therapies to treat existing PTSD.. The most recent themes in the emerging literature suggest that further study in the biological and genetic foundations of trauma response will clarify what populations will benefit the most from future research.

While future research will help to clarify the issues raised in the research, trauma treatment and prevention should continue to incorporate the current findings and follow the primary, secondary and tertiary prevention model for interventions. Primary prevention strategies should continue to aim at preventing sexual violence, child maltreatment or preventable events like car crashes that cause trauma. Secondary prevention strategies can leverage factors known to increase risk of adverse health outcomes following trauma, like having experienced a prior trauma or poverty, to target public campaigns against violence and child maltreatment to populations at high risk. For example, research to develop interventions targeting victims of sexual violence who also face poverty conditions would be a strong use of resources. The public health significance of research like that could affect the estimated 1 in 5 or 18% of US women and have been raped in

their lifetime (National Intimate Partner and Sexual Violence Survey, 2010). College campus violence prevention initiatives should also incorporate the factors known to increase risk in certain populations. Trainings like the ones provided by the Sexual Assault Response Teams (SART) could be administered to university health centers who may be better able to detect individual potential risks and have the tools to dialogue in a safe setting like a counseling or a physician visit. Finally, tertiary prevention measures, like establishing strong evidence-based trauma treatments, should look to this literature to incorporate the biological and behavioral findings to could increase efficacy of treatments.

Public Health Competencies Addressed During

I achieved each of my learning objectives, which were as follows: review the literature on risk factors associated with an increased risk for PTSD and summarize for SART audience. It was disappointing and challenging to transition from the ARIWRP work to the SART work. The results of the objectives for the ARIWRP work would have been more demonstrative of traditional public health work, like writing program content, summaries of findings and evaluations templates. Moving to the SART project, however, did reinforce the competencies that address leadership and public health administration as it common for resources for interventions to be competitive and for projects to have unanticipated hurdles. For more on the timeline of the experience, please see Appendix D.

Throughout the experience, I relied on my epidemiology and academic research skills the most. For example, in analyzing the risk factors for PTSD, I surveyed the literature find the incidence and prevalence of PTSD, interpreted the

findings on the proportion of those who develop PTSD compared to those who do not, and evaluated different types of risk for PTSD. Specific competencies I addressed in the experience include assessing the health status of a population, specifying approaches for prevention, examine the system the problem takes place in, and communicate public health messages to different audiences.

Conclusion

This was an extremely challenging experience to complete. Shifting between projects required that I continually refresh the purpose of the experience and what objectives I wished to achieve. As a student, it was a great opportunity to fine tune my working habits and to see what types of working styles align best with my own and my personality. I often doubted my abilities, but had great support and constant reminders of how I got where I am and why I care about this work.

Professionally, this was a very non-traditional placement. The structure of a traditional public health related organization with very clear projects and goals might have deepened other skills like program design and grant writing. This experience, though, challenged me in areas I was not already confident like data analysis, research summation, and writing and thus proved immensely valuable. In the future, I will seek more opportunities that allow me to impact mental health of populations and to deepen my understanding of working with policy makers and program designers on how to support survivors of trauma.

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.
- Brewin, C. R., Andrews, B., & Valentine, J. D. (2000). Meta-analysis of risk factors for posttraumatic stress disorder in trauma-exposed adults. *Journal Of Consulting & Clinical Psychology*, 68(5), 748-766. doi:10.1037/0022-006X.68.5.748
- Cohen, H., Kotler, M., Matar, M. A., Kaplan, Z., Miodownik, H., & Cassuto, Y. (1997). Power spectral analysis of heart rate variability in posttraumatic stress disorder patients. *Biological Psychiatry*, 41(5), 627-629. doi:10.1016/S0006-3223(96)00525
- DiGangi, J.A., Gomez, D., Mendoza, L., Jaons, L.A., Keys, C.B., Koenen, K.C. (2013) Pretrauma risk factors for posttraumatic stress disorder: A systematic review of the literature. *Clinical Psychology Review*. 33 (2013) 728-744.
- Felitti, V., Anda, R., Williamson, D., Spitz, A., Edwards, V., Marks, J., & ... Koss, M. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ACE) study. *American Journal Of Preventive Medicine*, 14(4), 245-258.
- Kessler, R.C., Sonnega, A., Bromet, E., Hughes, M., Nelson, CB. (1995). Posttraumatic Stress Disorder in the National Comorbidity Survey. *Archives of General Psychiatry*. 1995;52(12):1048-1060.
- The National Institutes of Medicine. Resources for Traumatic Events. Retrieved from <http://www.nlm.nih.gov/medlineplus/ency/article/001924.htm>
- Norris, F. H., & Slone, L. B. (2013). Understanding Research on the Epidemiology of Trauma and PTSD. *PTSD Research Quarterly*, 24(2/3), 1-13.
- Perkonig, A. A., Kessler, R. C., Storz, S. S., & Wittchen, H. U. (2000). Traumatic events and post-traumatic stress disorder in the community: prevalence, risk factors and comorbidity. *Acta Psychiatrica Scandinavica*, 101(1), 46-59. doi:10.1034/j.1600-0447.2000.101001046.x
- Zoladz A. R., & Diamond, D.M. (2013) Current status on the behavioral and biological markers of PTSD: A search for clarity in a conflicting literature. *Neuroscience and Biobehavioral Reviews*. 37(2013), 860-895.

Appendix A
Learning Objectives

Goal 1: Synthesize literature on risk factors for trauma and PTSD and assess public health implications				
Objectives (S)	Activities	Start/End Date	Who is Responsible (or collaborators)	Tracking Measures
Literature review	Review the literature on risk factors associated with an increased risk for PTSD such as age, multiple traumas, biomarkers (heart rate variability, inflammatory proteins, cortisol levels)	6/24/2014-8/30/2014	Madeline	Background section of a paper (3 pages)
Overview of the findings in the lit for SART	Create slides, references	6/24/2014-8/30/2014	Madeline and Mylea	Slides
Outline of presentation for SART	Organize findings into coherent presentation	6/24/2014-8/30/2014	Madeline	Word doc

First draft of Learning Objectives

Goal 1: Contribute to knowledge for supporting survivors of MST in a community based treatment program				
Objectives (S)	Activities	Start/End Date	Who is Responsible (or collaborators)	Tracking Measures
Review the literature on curriculum for MST programs	Literature review of curriculum material	May (9 hours) June (80 hours)	Dr. Mylea Charvat	Annotated bibliography
Review the literature on workbook design for MST programs	Literature review of workbook material	May (9 hours) June (80 hours)	Dr. Mylea Charvat	Annotated bibliography
Goal 2: Learn how to develop participant materials (workbook) for a community based clinical mental health program				
Objectives (S)	Activities	Start/End Date	Who is Responsible (or collaborators)	Tracking Measures
Contribute to workbook content	Write content with the team	July-August (180 hours)	Dr. Mylea Charvat	Writing submissions

<p>Review potential content for the workbook</p>	<p>Work with the team to integrate content for the workbook</p>	<p>July-August (180 hours)</p>	<p>Dr. Mylea Charvat</p>	<p>Mark-ups and notes</p>
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Appendix B

Summary of PTSD Treatment Materials for Artemis Rising Invisible War Treatment Program

EMDR

EMDR (Eye movement Desensitization and Reprocessing) is a psychotherapy supported by studies that show improvement in trauma processing after a series of structured sessions. Survivors of rape and sexual assault have shown benefits from EMDR because these traumas often require proper processing after a period of time. The therapist and the individual go through a series of steps and sessions designed to get a history of the traumatic events, teach techniques for relaxation, and then the individual uses imagery and visualizations to begin restructuring and processing the events. The process is repeated and the individual is asked for feedback that guides the progress and further session.

Somatic Experiencing

SE is a psychological method and an assessment framework for understanding a client's PTSD and then working through internalized and physically experienced trauma. The technique relies on ideas similar to other therapies that attempt to understand the stress response of an individual, but does not require the individual to re-experience the traumatic events. Instead, the individual is supported in undoing their learned fear-response that they may be stuck with post-trauma. SE is designed to “reset the nervous system, restore inner balance, enhance resilience to stress and increase people’s vitality, equanimity, and capacity to actively engage in life.”

(<http://www.traumahealing.com/somatic-experiencing/>)

PTSD Treatment Materials Review for ARIWRP

Prolonged Exposure Therapy for PTSD – Foa, Edna B., Hembree, Elizabeth A., Rothbaum, Barbara O. Oxford University Press, 2007

This text explains the foundation and application of PET for clinicians and other health professionals with knowledge of cognitive behavioral therapy (CBT). PET is described as a “brief CBT program that targets PTSD following various types of traumas” (p. 1). The authors first outline essential information about the aim and procedures of PE, which include:

- Education about common reactions to trauma and breathing retraining (p. 1)
- Repeated in vivo exposure to situation and objects that the client is avoiding because of trauma related distress and anxiety and repeated, prolonged imaginal exposure to the trauma memories (p. 2)

DSM 4 definitions of PTSD used for this text

Overview of the prevalence of PTSD:

- 60% of the US pop. exposed to traumatic events, 1995 study (p. 5), but PTSD rates indicate that most exposures do not result in PTSD (8%-14% PTSD as of 1995 study, p. 5).

The evidence base for PE as an effective treatment for PTSD is sound:

- 20 years of research support PE as an effective treatment model for PTSD (p. 6)

Emotional Processing Therapy and Fear:

EPT and PE is a framework and therapy model based on the fear structure: The fear structure can represent a realistic threat, but becomes pathological in the presence of (p. 13):

- Improper associations between stimulus elements that do not represent the world
- Physical and avoidance response elicited by harmless stimuli
- Excessive and easily triggered response interfere with adaptive behavior
- Harmless stimuli erroneously associated with threat meaning

Model: (p. 13)

- Activate fear structure
- New information that is incompatible with erroneous info in fear structure must be added to structure
- Then, info that evoked anxiety symptoms will cease

Benefits: (p.16)

Proven to be highly effective against PTSD and co-occurring disorders

Risks of program: (p.16)

Emotional discomfort and potential failure to improve, worsening before improvement, and worsening overall have very low incidence.

Outline of program: (p.19)

- 10-15 weekly or twice-weekly 90 min sessions
- Goals, timeline, info to convey, techniques, and homework to assign are covered in each session
- Breathing is recorded, self-reporting to gauge progress
- Sessions are outlined on pages 20-21

Appropriateness of PE for MST survivors and assessment guide: (p.24-30)

1 month past even for:

- Individuals with PTSD and related symptoms
- Individuals with significant memory of the events

Use only after resolution of:

- Imminent threat
- Self-injury behavior
- If with current psychosis, stabilize on medication
- Currently at risk of assault
- Lack of clear memory
- Drug and alcohol
- High risk environment
- Severe dissociative symptoms (Newly DSM 5 criteria: impact?)
- Axis II disorders
- PTSD with high guilt and shame

Strategies for success: (p. 31-34)

- Understand considerations of interpersonal violence
- Know the model, build an alliance, know the reason for using it
- Challenges: build alliance, motivation, self-care (allow the model to guide, consult with an expert frequently)

Chapters 3-7 are sessions specific

Chapter 8: trouble shooting

Appendix C

Appendix E



**MASTER OF PUBLIC HEALTH
STUDENT / PRECEPTOR AGREEMENT AND LEARNING CONTRACT**

(To be completed by the student in consultation with the field experience Site Preceptor. Attach the Learning Contract and MPH Fieldwork Project Proposal)

Student: <i>Madelaine Peyton</i> Agency and Department/Division/Program: <i>Artemis Rising</i> Preceptor: <i>Dr. Myka Charvat</i> Dates of Placement: <i>4/29/14 - 8/30/14</i>

I. Learning Contract – Attachment 1

Using the attached matrix to describe the project(s) in which you will be contributing, fill out following sections:

1. Overall goal(s) of internship
2. Measureable objectives that relate to the achievement of goal(s)
3. Activities that correspond to each objective
4. Start-end dates
5. Responsible parties involved
6. Tracking measures (evaluation indicators)

II. MPH Program Competency Inventory – Attachment 2

Of the USF MPH Program Competencies, Core Knowledge Areas, and Interdisciplinary Threads listed in the Fieldwork Handbook; identify which competencies, areas and threads you will address during this fieldwork experience. Please complete the inventory to address how you will demonstrate competency in the identified areas through the fieldwork experience.

III. Acknowledgements

We have participated in development of this field-training proposal and agree to the conditions specified above. If it becomes necessary to alter any of the specified conditions, we agree to make the changes known to each of the persons whose signatures appear below.

Student Signature	<i>Madelaine Peyton</i>	<i>4/29/14</i>	Date
Preceptor Signature	<i>Myka Charvat</i>	<i>4/29/14</i>	Date
MPH Fieldwork Coordinator			Date

Appendix D

Activity	April	May	June	July	August
Meet and discuss prospective projects					
Select and plan Madeline's goals, objectives and deliverables					
Mylea shared Artemis Rising Program Content and Madeline to review in preparation for contributing to client workbooks					
Madeline to read and review treatments and workbooks to use for Artemis program. Prepare slides and notes on the content.					
Review and edit goals to reflect transition away from Artemis Rising program to SART presentation.					
PTSD Lit review					
Risk factors research					
Risk factors outline, slides					
Administrative (hours planning, paperwork)					
Films, Conferences, Current Events Reading					