

Proposal for Class:

“Understanding the psychological consequences of natural disasters upon victims, and Disaster Response interventions that might help to mitigate the development of psychiatric illnesses.”

Class 1: Traumatic stress disorders:

Understanding traumatic stress disorders: Specific symptoms differentiating the various traumatic stress disorders, how symptoms are organized, and how they are diagnosed.

Classes 2 & 3: Human-made and man-disasters and their differences:

The relationship and/or differences between natural disasters and human-made disasters, and to what degree they correspond with functional impairment, with traumatic stress, and other psychological disorders (e.g, major depression, phobias, etc) among victims of such disasters.

Class 4: How traumatic stress disorders affect both physical health and psychological health:

How traumatic stress disorders affect both physical health and psychological health, including overlapping disorders, such as addictions, phobias, learned helplessness, and depression. Are there certain vulnerabilities in people more prone to psychiatric illness, or certain traits that promote resiliency to mental disturbance post disasters?

Class 5: How disasters impact children:

The impact of disasters on children, and interventions to help minimize long-term mental illness.

Class 6: Neurobiological repercussions of traumatic events:

How understanding of these might influence strategies in disaster response, and potential treatment interventions of victims of disaster.

Class 7: Early interventions after trauma:

What are exposure therapies and do they diminish, increase, or have no effect on the traumatic stress and other psychiatric disorders?

Class 8: What is the role of perceived self-efficacy, supportive DR interventions, etc. in the development or non-development of psychiatric disorders subsequent to experiencing natural disasters?

Are currently proposed alternative models of intervention helpful?

Class 9: Alternative interventions:

Alternative interventions to help mitigate against the formation of or severity of psychiatric disorders in the aftermath of natural disasters.

Class 10-12: Final Project:

Based upon knowledge gained from this class and other sources of learning, what hypothesis would you propose regarding the effectiveness or lack thereof of the disaster relief interventions utilized by MA Math? Might these interventions be effective in reducing the severity and incidence of traumatic stress disorders in the wake of natural disasters? Please design a study to measure your hypotheses.

Reading List:

Class I (28)

Acute Stress Disorder. (Feb 06, 2016). Trauma & dissociation. (2 pgs)

Bryant, R. A., Friedman, M. J., Spiegel, D., Ursano, R. and Strain, J. (2011), "A review of acute stress disorder in DSM-5." *Depression and Anxiety*, 28: 802–817. (11p)

Grillon, C, Pine, D S, Lissek, S, Rabin, S, Bonne, O, Vythilingam, M (2009). "Increased Anxiety During Anticipation of Unpredictable Aversive Stimuli in Posttraumatic Stress Disorder but not in Generalized Anxiety Disorder." *Biological Psychiatry*, 66, (1), 47–53. (1 pg)

DSM-5 Criteria for PTSD, Brainline Military Site. (1 pg)

National Collaborating Centre for Mental Health (UK). "Post-Traumatic Stress Disorder: The Management of PTSD in Adults and Children in Primary and Secondary Care." Leicester (UK): Gaskell; 2005. (NICE Clinical Guidelines, No. 26.) (13.5p)

Class II (21)

Chong, Z. X., Ho, J. H., Chang, W. L., Chong, W. L., Khong, S. C., & Ing, S. K. (2015). Prevalence of post-traumatic stress disorder (PTSD) among flood victims in Malaysia: difference between Kuala Lumpur and Kelantan. *Int Med J. Forthcoming*.(4p)

Foa, EB, DJ Stein, AC McFarlane (2006). "Symptomatology and psychopathology of mental health problems after disaster." *Journal of Clinical Psychiatry*, 66.199.228.237 (9p)

Galea, Sandro, Arijit Nandi, and David Vlahov. "The epidemiology of post-traumatic stress disorder after disasters." *Epidemiologic reviews* 27.1 (2005): 78-91. (8pgs)

Class III (22)

Fu, Y., Chen, Y., Wang, J., Tang, X., He, J., Jiao, M., ... & Li, J. (2013). Analysis of prevalence of PTSD and its influencing factors among college students after the Wenchuan earthquake. *Child Adolesc Psychiatry Ment Health*, 7(1), 1. (5 p)

Goenjian, Armen K., et al. "Prospective study of posttraumatic stress, anxiety, and depressive reactions after earthquake and political violence." *American Journal of Psychiatry* (2000). (5p)

Neria, Yuval, Arijit Nandi, and Sandro Galea. "Post-traumatic stress disorder following disasters: a systematic review." *Psychological medicine* 38.04 (2008): 467-480. (7pgs)

Wang, Xiangdong, et al. "Longitudinal study of earthquake-related PTSD in a randomly selected community sample in north China." *American Journal of Psychiatry* (2000). (5.5p)

Class IV (~25)

Castaneda R , Sussman N , Westreich L , Levy R , O'Malley M, (1996). "A review of the effects of moderate alcohol intake on the treatment of anxiety and mood disorders." *The Journal of Clinical Psychiatry* 57(5): Abstract (1p)

Flory, Kate, et al. "Alcohol and cigarette use and misuse among Hurricane Katrina survivors: psychosocial risk and protective factors." *Substance use & misuse* 44.12 (2009): 1711-1724. (8p)

Keyes, K.M, Hatzenbuehler, M.L., Grant, B.F., Hasin, D.S. (2012). "Stress and alcohol: Epidemiologic Evidence." *Alcohol Research: Current Reviews*, 34, (4.5p).

Nolen-Hoeksema, S & Morrow, J. (1991). A Prospective Study of Depression and Posttraumatic Stress Symptoms After a Natural Disaster: The 1989 Loma Prieta Earthquake. *Journal of Personality and Social Psychology*, 61 (1), 115-121. (6p)

Stewart, Sherry H. "Alcohol abuse in individuals exposed to trauma: a critical review." *Psychological Bulletin* 120.1 (1996): 83. (relevant sections)

Class V (28)

Kar, N. "Psychological impact of disasters on children: review of assessment and interventions" (2009). *World Journal of Pediatrics*, 5, (1), P 5.

Pfefferbaum, B., Varma, V., Nitiéma, P., & Newman, E. (2014). Universal preventive interventions for children in the context of disasters and terrorism. *Child and adolescent psychiatric clinics of North America*, 23(2), 363-382. (10p)

Taukeni, S., Chitiyo, G., Chitiyo, M., Asino, I., & Shipena, G. (2016). Post-traumatic stress disorder amongst children aged 8–18 affected by the 2011 northern-Namibia floods. *Jàmbá: Journal of Disaster Risk Studies*, 8(2), (5p).

Wang, C. W., Chan, C. L., & Ho, R. T. (2013). Prevalence and trajectory of psychopathology among child and adolescent survivors of disasters: a systematic review of epidemiological studies across 1987–2011. *Social psychiatry and psychiatric epidemiology*, 48(11), 1697-1720. (8P)

Class VI: (26)

Arnsten, A. F., Raskind, M. A., Taylor, F. B., & Connor, D. F. (2015). The effects of stress exposure on prefrontal cortex: translating basic research into successful treatments for post-traumatic stress disorder. *Neurobiology of stress*, 1, 89-99. (14.5p)

Cheng, B., Huang, X., Li, S., Hu, X., Luo, Y., Wang, X., ... & Bi, F. (2015). Gray matter alterations in post-traumatic stress disorder, obsessive-compulsive disorder, and social anxiety disorder. *Frontiers in Behavioral Neuroscience*, 9. (8p)

Head, KA, Kelly, GS (2009). "Nutrients and Botanicals for Treatment of Stress: Adrenal Fatigue, Neurotransmitter Imbalance, Anxiety, and Restless Sleep." *Alternative Medicine Review*, 14, (4).

Class VII: (~35)

Bryant, RA, "Early intervention for PTSD" (2007). *Early Intervention in Psychiatry*, 1: 19-26. (5)

Eftekhari, A, Ruzek, JI, Crowley, JJ, Rosen, CS, Greenbaum, MA, Karlin, BE (2013). *Effectiveness of National Implementation of Prolonged Exposure Therapy in Veterans Affairs Care*. *JAMA Psychiatry* 70(9):949-955. (7p)

Morris, DJ. (after 2013). "Trauma post trauma: *The "gold standard" treatment for PTSD makes many vets' symptoms even worse.*" (3p)

Schauer, E, Neuner, F, Elbert, F, Ertl, V, Onyut, LP, Odenwald, R & Schauer, M (2004). *Narrative Exposure Therapy in Children: a Case Study*. *Intervention*, 2 (1),18 - 32. (10)

van Emmerik, AP, et al. "Single session debriefing after psychological trauma: a meta-analysis." (2002) *Lancet* 360.9335: 766-771. (4p)

Zang, Y et al. (2013). A randomised controlled pilot study: the effectiveness of narrative exposure therapy with adult survivors of the Sichuan earthquake. *BMC Psychiatry*, **13**:(41). (8p)

Class VIII: (34)

Benight, C., Swift, E., Sanger, J., Smith, A., & Zeppelin, D. (1999). Coping self-efficacy as a mediator of distress following a natural disaster. *Journal of Applied Social Psychology*, 29, 2443–2464. (7)

Hobfoll, Stevan E., et al. "*Five essential elements of immediate and mid-term mass trauma intervention: empirical evidence.*" *Psychiatry* 70.4 (2007): 283-315. (19)

Neria, Y., & Shultz, J. M. (2012). Mental health effects of Hurricane Sandy: Characteristics, potential aftermath, and response. *JAMA*, 308(24), 2571-2572. (2)

Norris, Fran H., and Susan P. Stevens. "Community resilience and the principles of mass trauma intervention." *Psychiatry* 70.4 (2007): 320-328. (7.5)

Nopembi, S, Saryo, Sugiyama, Y. (2015). Reducing children's negative emotional states through physical education and sport in disaster-prone areas. *Advances in Physical Education* 6, 10-18. (5)

Saryono, and Sugiyama, Y. "*Reducing Children's Negative Emotional States through Physical Education and Sport in Disaster-Prone Areas Soni Nopembri*" (2016). *Advances in Physical Education*, 06 [01]. (7)

Class IX (33)

Catani, C., Kohiladevy, M., Ruf, M., Schauer, E., Elbert, T., & Neuner, F. (2009). "*Treating children traumatized by war and Tsunami: a comparison between exposure therapy and meditation-relaxation in North-East Sri Lanka*". *BMC psychiatry*, 9(1), 1. (8)

Kearney, D. J., Malte, C. A., McManus, C., Martinez, M. E., Felleman, B., & Simpson, T. L. (2013). Loving-kindness meditation for posttraumatic stress disorder: A pilot study. *Journal of Traumatic Stress, 26*(4), 426-434. (6.5)

King, A. P., Erickson, T. M., Giardino, N. D., Favorite, T., Rauch, S. A., Robinson, E., ... & Liberzon, I. (2013). A pilot study of group mindfulness-based cognitive therapy (MBCT) for combat veterans with posttraumatic stress disorder (PTSD). *Depression and anxiety, 30*(7), 638-645. (7)

Kim, S. H., Schneider, S. M., Kravitz, L., Mermier, C., & Burge, M. R. (2013). Mind-body practices for posttraumatic stress disorder. *Journal of Investigative Medicine, 61*(5), 827-834. (7)

van der Kolk Laura, B. A., West, J., Rhodes, A., Emerson, D., Suvak, M., & Spinazzola, J. (2014). Yoga as an adjunctive treatment for posttraumatic stress disorder: a randomized controlled trial. *The Journal of clinical psychiatry, 75*(6), 1-478. (5)