

Discussion leaders: Julien Guillaumot and Sharilyn Lum
April 28, 2003

Trauma as Etiology **Effects on psyche/emotions/relationships/distress PART I**

Discussion articles:

Fromm, S. (2001) Total Estimated Cost of Child Abuse & Neglect In The United States (2001),
From Prevent Child Abuse America, Retrieved 17 April 2003 from
http://www.preventchildabuse.org/learn_more/research_docs/cost_analysis.pdf
Ross, C.A (2000) *The Trauma Model: A solution to the problem of comorbidity in psychiatry.*
Richardson Texas: Manitou Communications, Inc. Pages 69-219

Notes:

- **Discussion topics and questions are listed in bold print.**
- Facilitator summaries are listed in bullets under headings.
- *Summary of the discussion is listed in italics. Discussion summaries come from in-class participation in which class members separated into small groups where they answered specific questions, then later brought their ideas to the larger class as a whole.*

General Principles of the Trauma Model **Ross, 2000**

- **Definition of Trauma**
- **Measurement of Trauma**
- **Trauma Dose-Response Curves**
- **Developmental Susceptibility**
- **The Threshold Principle**
- **Priming**
- **The Noxious Effect of Active Disease**
- **Heterogeneity Within Diagnostic Categories**
- **Selection Bias**
- **Treatment Failures Tend to be Trauma Model Cases**
- **Treatment Intervention at Different System Levels**
- **Animal Models of Trauma**
- **Diagnostic Non-Specificity of Selective Serotonin Reuptake Inhibitors (SSRIs)**
- **When the Perpetrator is a Primary Attachment Figure**

Definition of Trauma

- PTSD is defined in the DSM-IV-TR with two features:
 - Person experienced, was confronted with, or witnessed an event that involved actual or threatened death or serious injury, or a threat to the physical integrity
 - Person's response involved intense fear, helplessness, or horror
- Trauma is not only related to the actual traumatic experience but also the impact on the person (this definition makes sense in that two people can experience a traumatic event differently, which is why it is important to study the trauma response)
- Problem with DSM criteria according to Ross
 - fear, helplessness, and horror are just a few of the numerous experiences that someone can feel as a result of a traumatic experience (others include numbing and detachment as in the DSM criteria for acute stress disorder) → basic idea is that there is an extreme event and an extreme response
 - conventional definition only speaks of bad things happening but does not address the absence of such events (i.e. absence of love, affection, and protection from parents)

Measurement of Trauma

- Given this complex definition, it is important to look at the development of appropriate and reliable measures in understanding trauma

Trauma Dose-Response Curves

- Trauma model assumes that there is a dose-response curve for trauma (thinking about dose response curves in pharmacology, there is a window where symptoms are reduced as your dose increases)
- Just one aspect of trauma (i.e. number of acts of abuse) cannot generate a dose response curve when looking at symptoms developed → this is why simply looking at rates of reported sexual abuse in psychological disorders may not reveal the actual role of trauma across disorders
- Must look at numerous components in calculating trauma dosage (i.e. for sexual abuse, you have to look at things such as age at onset, duration, number of acts, severity, number of perpetrators, degree of intimidation, bizarreness of acts, how closely related the perpetrator is to the survivor, etc)
- **What is your reaction to trauma dose-response curves?**
- *In general, the idea of increasing symptomatology (i.e. higher scores on the DES to use Ross's example) with greater levels of trauma makes sense. Ross's explanation is simple enough for someone unfamiliar with the effects of trauma to understand.*
- *However, this simplicity is also a limitation. Ross's presentation of dose response curves implies that the effects of experiencing trauma are additive. This belies the complexity and variability of the factors involved in trauma. For instance, in the case of sexual abuse, how would factors such as the duration of abuse, age at onset, bizarreness of the acts, and relationship to the perpetrator be weighted in determining a person's "dose" of trauma? It seems as though Ross treats these factors as if they could be measured on the same scale.*
- *Despite hesitation to fully accept the simple dose response model, we agree with the possibility of shifting the dose response curve to the left or right, depending on an*

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individual's unique combination of protective (i.e. strong social support) and risk (i.e. lower trauma threshold) factors.

Developmental Susceptibility

- Trauma model assumes that there is a window of developmental susceptibility for problems developing from traumatic experiences
- This window opens when someone experiences a trauma and never fully closes but rather it is a matter of decreasing vulnerability with increasing age
- Important to look at developmental susceptibility when thinking about childhood trauma
 - On one hand, a child's brain is more adaptable but also more capable of being affected by environmental input such as a traumatic experience

The Threshold Principle

- Trauma model assumes that people are born with set trauma thresholds but that if the trauma dose is set high enough, everyone will develop psychological difficulties
- Despite these thresholds, other variables can affect susceptibility to trauma responses, both positively and negatively

Priming

- Another assumption of the trauma model is that a trauma response to a given traumatic experience will be primed by a prior trauma (i.e. war veterans who have experienced childhood abuse may have a higher risk for development PTSD)

The Noxious Effect of Active Disease

- Trauma model looks at feedback loops within a trauma survivor's brain and social environment → unresolved trauma causes more trauma
 - Flashbacks from traumatic experiences → flashbacks alone can be traumatic, which creates a cycle of trauma
- **How can therapy address the problem of feedback loops in trauma survivors?**

Heterogeneity Within Diagnostic Categories

- For any disease, there are several developmental pathways
- None of the psychiatric symptoms have any diagnostic specificity → etiologic heterogeneity: "there is no reason to expect that the brain would generate discrete sets of symptoms for discrete etiologies, rather one should expect permutations and combinations of symptom patterns"
- **What are the implications for a Trauma as Etiology Model?**

Selection Bias

- Problem of comorbidity arises from a biased sample of all individuals meeting criteria for one or more DSM disorders. As a result, the trauma model has low external validity for "individuals who have not experienced significant trauma beyond the usual hardships of life"
- **What is the problem with limiting ourselves with DSM-defined trauma? Can subjective experience and self-report be the critical variables in defining one's level**

of trauma and if so, what does it say of the trauma model's level of external validity?

- *Limiting ourselves with DSM-defined trauma does not take into account the individual's subjective experience. It does not take into account all forms of abuse, especially different types of sexual abuse perpetrated when fear is not present. It also does not include absences, such as neglect.*
- *Self-report can also be problematic when someone is not defining something as traumatic. An example is when someone is dissociating or when trauma is causing problems in areas unseen by the client. Minimization of trauma is often done by survivors as a means of protection.*

Treatment Failures Tend to be Trauma Model Cases

- Ross states that "patients can be divided into two treatment outcome categories: successes and failures"
- **What is the limitation of such thinking and how does it contradict his approach thus far?**
- *Limitations include the following:*
 - *Defining success is difficult in and of itself.*
 - *It is important to identify and understand who is defining success, such as a view is dichotomous in thinking, why not have more of a continuum when thinking about failure and success.*
 - *Having just two categories is obviously limiting and sets more people up for failure; people may find themselves stuck in the unsuccessful category even if improvements are made.*
 - *This perspective assumes a static outcome.*
- *This view contradicts Ross's view because it is static and does not change over time. He rarely speaks in dichotomous terms because of the great variation that exists between individuals. Ross is not necessarily mainstream in his thinking and this view seems more conventional*

Treatment Intervention at Different System Levels

- Ross states that "brain scans should function as psychotherapy outcome measures"
- **Weigh the pros and cons of such an approach, not only from a dichotomous (as Ross claims outcomes to be) treatment perspective but also from a psychoanalytic perspective.**
- *Using brain scans as therapeutic outcome measures could offer a number of advantages. From the perspective of advancing scientific knowledge, brain imaging data could help to better understand the impact of trauma on the brain. Such data might also provide better measures of the active ingredients of successful trauma therapy if used in conjunction with well-controlled studies. Brain scans might also help us to avoid the problems of biased self-reports and researcher expectancy effects.*
- *Potential disadvantages of using brain scans as outcome measures warrant caution, however. The primary danger lies in relying solely on brain scan data to evaluate therapy outcome. What if a post-therapy brain scan suggests "normalization" but the client doesn't feel any improvement? This would create a validation problem – shouldn't*

the client's sense of improvement or lack thereof take precedence in determining whether therapy was a success?

- *Regarding Ross's dichotomous perspective on therapy outcome (the problem of false dichotomies is beyond the scope of this discussion, but at minimum we would argue that successful outcomes fall along a continuum and depend on the goals of therapy), using the results of a brain scan to categorize treatment as a success or failure glosses over the complexities of the brain and the trauma response. Of the myriad factors likely relevant to interpreting the results of a brain scan, differing degrees of plasticity among individuals, the effects of possible pharmacological interventions, and the multiple brain regions involved (not to mention their interconnections) are just a few.*
- *Exactly what degree of change would qualify as a successful outcome is unclear. How much of a change is sufficient to claim therapeutic success? Moreover, the difficulties in interpreting any brain imaging data would also apply. Although imaging data have greatly expanded our understanding of brain structure and function, they are correlational in nature. Even if a particular area "lights up," that doesn't necessarily tell us if that area is critical to improvement.*
- *Brain imaging data would certainly provide a useful tool for assessing therapy outcomes, but should be used with other measures, the most important being the client's perspective.*
- *From a psychodynamic perspective, whether or not brain imaging shows significant change after therapy, such data does not speak to the underlying processes responsible for change. Brain imaging data cannot tell us how or why positive change occurred.*

Animal Models of Trauma

- *When comparing human with animal models, Ross states that humans will "exhibit the same biological dysregulation seen in the lab animals" but that because clinical presentations will normalize on antidepressants and relapse on discontinuation "we need to account for spontaneous normalization of the biological dysregulation as part of the natural history of the active clinical disorder"*
- **What is Ross talking about and why should we control for such normalization? Is it true that relapse systematically occurs on discontinuation? How do humans differ from animals when it comes to dealing with psychological adjustment?**
- *Both animals and humans change and adapt biologically but with humans, there are additional capacities such as emotions and thinking. These differences put humans apart from animals. As in any treatment research study, one wants to control for all other factors that may be leading to an outcome. Therefore, Ross's suggestion of controlling for normalization makes sense while at the same time we have to ask ourselves if there is such a thing as "normalization" for a given mental disorder.*
- *For example, can we confidently say that for people who are depressed this is about how long it should last and this is when it normally subsides? We don't think so, given that humans are different from animals because emotions come into play. In addition, our abilities to think and use our minds are also critical.*

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Diagnostic Non-Specificity of Selective Serotonin Reuptake Inhibitors (SSRIs)

- Ross explains SSRIs are effective for numerous disorders illuminating their mechanism of action
- **What is the problem with this assumption in light of the fact that SSREs seem to have the same effect on symptom reduction?**

When the Perpetrator is a Primary Attachment Figure

- Ross states that the core target of trauma therapy is the problem of attachment to the perpetrator. He discusses transmarginal inhibition or Stockholm Syndrome. (In 1973, four Swedes held in a bank vault for six days during a robbery became attached to their captors, a phenomenon dubbed the Stockholm Syndrome.) According to psychologists, the abused bond to their abusers was a means to endure violence
- **What do you make of this theory and why would it be adaptive to do this especially when looking at adult-adult relationships?**

The Trauma Model and DSM Disorders

Ross, 2000

- **Mood Disorders**
- **Schizophrenia and Other Psychotic Disorders**
- **Anxiety Disorders**
- **Substance-Related Disorders**
- **Somatoform Disorders**
- **Dissociative Disorders**
- **Factitious Disorders**
- **Eating Disorders**
- **Sexual and Gender Identity Disorders**
- **Sleep Disorders**
- **Impulse-control Disorders**
- **Borderline Personality Disorders**
- **Other Axis II Disorders**
- **Childhood Disorders**
- **Axis III Disorders**

Totals Estimated Cost of Child Abuse and Neglect in the US.

Fromm, 2001

Can we truly estimate the cost of child abuse and neglect?