

**Personal View: The Necessity for Defining a New Clinical Entity: Post-Traumatic Stress Disorder—Life Threatening Illness (PTSD-LTI)**

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## **Abstract**

Based on what may well be the most intensive psychotherapy with subjects who have trauma from life-threatening illnesses (LTI), with MDMA experiences as a fundamental part of the process, a new entity is defined—PTSD-LTI.

The diverse phenomena of this trauma are presented along with proposed criteria for making the diagnosis. A framework for successful treatment is included. With a rapidly increasing population of survivors due to modern medicine's successes, many of them traumatized by the effects of treatment on mind as well as body, it is essential that prevention of this trauma and its treatment be provided along with medical interventions. Delineation of the effects on practitioner awareness and the provision of psychotherapy is provided.

## **Introduction**

The study of the emotional impact of life-threatening illnesses (LTIs) presented in the MDMA assisted psychotherapy report in this issue of *Journal of Psychopharmacology* leads to addressing the profound changes in awareness that took place in the practitioners administering to our patients. Over the course of the three years of this intensive and intense study, we experienced a progressive revelation of the traumatic nature of this diagnosis and its aftermath, and its various manifestations in cognition, motivation, affect, spirit, meaning, relationships, and view of self. Exposed to our subjects' suffering and impacted ways of being and to their tension with potential recurrence and death, we came to a view of what will be defined as Post-Traumatic Stress Disorder—Life Threatening Illness (PTSD-LTI). This framework for assessment and treatment arises from medicine's successes, impacts and limitations. It applies to an ever-growing population of survivors.

## **The Causes and Scope of PTSD-LTI**

PTSD-LTI continues the expansion of psychology's reclamation of trauma to its true status as the overwhelming cause of human distress and dysfunction. That realization remains incomplete. Near attitudinal blindness continues to the effects of traumas to humans caused by prejudice and culturally embedded formats--such as racism, sexism, caste, and class that are forms of domination; to war; refugee displacement; poverty and to illness. That myopia remains and limits our evolving view (Wolfson, 2011). Prevention of trauma remains the abiding issue for developing a healthy population instead of a wounded population (World Health Organization).

Our view of trauma from within psychiatric diagnostic categories such as those for depression and anxiety tends to be only partially reflective of lives lived and affected by past and ongoing trauma (Wolfson, 2016). Focusing on limiting clusters of symptoms, diagnoses can be constraining conceptual structures that prevent clear views of the complex matrix of existence and the fullness of the expressions of suffering in their myriad aspects (Greenberg, 2010; Whitaker, 2010).

It is essential to turn to a comprehensive and phenomenological view of suffering--its prolongation beyond the intruding traumas that are immediately afflictive; an awareness of prolonged traumatization; developmental trauma; its diverse expression in diverse beings. This enables the therapeutic conversations that give forth recognition and validation to trauma victims in need of understanding themselves and for being understood. This does and will engender the conscious connections that are healing in themselves and lead to the alleviation of suffering--to

the extent we are able; and to the prospect for better caring of those who have been afflicted with traumas (Van der Kolk, 2015).

PTSD-LTI arises as scientific medicine in its theories and practices creates its own resultant formats and causations. Without the possibility of escape, medicine is always embedded in the ecology of nature, the cultural stream and the individual beings of our patients. The ecological/social/personal consequences of our interventions are inevitable and need to be part of the calculation of medicine's impact and values. Often, these are new unintended and unforeseen effects. As is true of so much of technology, medicine proceeds with its science without predicting, or paying much attention to the social and personal results. When they are revealed we tend to play catch-up and devote inadequate resources to their amelioration (Gawande, 2014).

Iatrogenic trauma in medicine is often the result of being in the difficult position of choosing remedies that may do significant but less harm than the illnesses treated. Often it is a choice between onerous consequences for doing or not doing. The prolongation of life may well be a very difficult and unhealthy experience (Moussavi et al., 2007; Grassi and Costantini, 2014). In this crucible we serve best as guides, with awareness that the determination of difficult choices rests within the format of our deep conversations with our patients. If health care is deemed a human right, as it well needs be as a mark of civilization, then this conversation is essential as an informed supportive discussion between practitioner, patient and family--and it is profoundly choiceful in its essence. The democratization of health care has been a protracted process with consequences for the role and posture of the physician in relation to patients, and for the patient in their empowerment and the depth of information acquired and, therefore, their knowledgeable participation in choices for care. This is an ongoing, evolving cultural dialogue of great importance for all of us (Truglio-Londrigan et al., 2012).

There are varying degrees of threat to life from illnesses and a constant advance of medicine in its successful treatment of them. Having an historical view is helpful for knowing the progression of traumatic impacts on populations. For example, prior to the era of hygiene and antibiotics, LTI consciousness would have been focused on infectious disease. Grief for loss of infants, mothers, children, and youth, the inevitability of plagues, and short life expectancy would have been a ubiquitous part of the emotional landscape. Bereavement was inescapable as was the sense of constant risk.

In our present first world societies, early death is much less frequent and less of a conscious anxiety. While there is a large literature from parents who have lost children (Wolfson, 2011), our primary focus of care and concern has shifted to later-in-life, to prolonging life from middle age on. In this, our post-millennial period, the successes of saving lives for more time to live has resulted in the creation of an ever-enlarging population of survivors. Many of whom having been left compromised in their lives by their illnesses and treatment, live in a fearful landscape of potential relapse, recurrence and death (Arrieta et al., 2013; Brown et al., 2003; Carney et al., 2003; Barth et al., 2004; Satin et al., 2009). In recent years there have been marked increases in the frequency of depression and other diagnoses in this population emphasizing the gravity of the problem (Singer et al., 2015).

PTSD-LTI exists as a world-wide, pervasive syndrome. While it is difficult to obtain accurate statistics for LTI significant survivals from the overall spectrum of illnesses that humans encounter that may leave them emotionally traumatized, there are epidemiological studies in categories available by which to make estimates for certain illnesses. Developing world countries having less available medical treatment and poorer resources for collecting data are therefore more difficult to evaluate (see Global Burden of Disease for an analysis of this). Also, there is the arbitrariness of time designation for LTI survival—the choices variably being: not specified, 1 year, 2 years, 5 years, or 10 years.

Focusing on cancer, though a false restriction to the breadth of this problem, enables us to have a view of the population of survivors from cancer, which is more easily assessed from an available epidemiological perspective. ACS puts the number of cancer survivors at 14.5 million in 2014, with expectation of 19 million in 2024 (American Cancer Society, 2014). In the UK, in 2017, 2.5 million people were living with cancer (Macmillan Cancer Support, 2017). The worldwide estimate for new cancers was 17.5 million cases (Global Burden of Disease Cancer et al., 2017). Without having a statistical sense of the proportion of survivors from cancer alone who may be suffering from PTSD-LTI, the survivor numbers give a sense of the immensity of the prevalence. If the percentage was 5%—and it would seem much higher indeed— in the US alone, this would amount to over 700,000 persons. (see Cordova et al, and Andrykowski et al, for limited studies of PTSD after breast cancer treatment estimating the figure to be between 5 and 10% (Cordova et al., 1995; Andrykowski et al., 1998). The Global Burden of Disease Study estimates 208.3 million disability-adjusted-life-years (DALYs) (Global Burden of Disease Cancer et al., 2017). There is no estimate of the percentage of DALYs due to the PTSD-LTI aspect but from any consideration, it can only be enormous.

Viewed from only this vantage point of cancer survival, there is a clear demonstration of the need for effective psychotherapeutic interventions among the survivors of medicine's successes who suffer with PTSD-LTI. And from the standpoint of prevention, beginning contact and counselling at the time of diagnosis is an obvious social goal continuing with support through the illness, its treatment, and life's resumption, this often with a modified sense of self.

### PTSD-LTI and MDMA Assisted Psychotherapy

While attention to the experience of those facing death from LTIs has become a more prominent part of palliative care and hospice consciousness and there have come to bear a variety of psychotherapies, it is only in recent years that it has been possible for a resumption of clinical interest in the potential for psychedelic medicines—provided in an assisted psychotherapy format—to address PTSD-LTIs (Gasser et al., 2014; Griffiths et al., 2016; Grob et al., 2013; Ross et al., 2016). What makes this so appealing has been the demonstration of efficacy in small Phase I and II studies—with MDMA in PTSD; with Psilocybin with LTIs, and now, ours, the first to utilize MDMA as a medicine for this indication. Prior studies with psilocybin have demonstrated the value of peak experiences on PTSD-LTIs and reduction of anxiety and depression. MDMA as less of a hallucinogen and operating through a variety of means to promote empathic connection to oneself and others, offers a different modality for psychotherapy (Feduccia et al., 2018; Mithoefer et al., 2016).

In the accompanying article, we delineate what might be regarded as the most intensive psychotherapeutic experience to date with persons struggling with the aftermath of LTIs. The primary result of our intensive MDMA-assisted psychotherapy experience with our 18 subjects was and is a deep and intimate view of the consequences of LTIs from the impact of their arising, through diagnosis, treatment and survival. While our criteria for entry into the study and our principle outcome measure was anxiety related to having an LTI, it became clear that there was a much larger theme, a much greater symptomatic impact that was and is traumatic in its scope.

We provided a variety of assessments that are tabulated in the accompanying article, our treatment enabling a great measure of improvement as indicated on these scores. Yet, in the large experience of being with those who struggled with the threat and aftermath of LTIs, this formatting inadequately expresses the breadth and qualities of the serious impact potentially on all aspects of being and being connected. Because of the unprecedented number of sessions and the 3-5 24-hour periods for therapeutic presence and participation, this in our home setting, as well as collateral contact and evaluation, our exposure to the suffering and post-traumatic growth of our subjects was large and impactful for both subjects and therapists (Wolfson and Mithoefer, 2015).

Participants are actively engaged with therapists in an exploration of self, accessing their own capacity for healing from trauma (Carhart-Harris et al., 2015; van Wel et al., 2012). MDMA has been called an ‘empathogen’ for good reasons, on both clinical and biological grounds. Coupled with intensive psychotherapy, it offers remarkable results in time periods generally shorter than with conventional psychotherapy. Because it enables both a tolerance to examine and feel one’s own suffering and the suffering of others, and because the experience has a deep non-verbal aspect, change and relief are catalyzed. This occurs with a reduction of defensive structures and even a moving of them out of the way, engendering the opportunity for mindfulness to occur (Greer and Tolbert, 1986; Wolfson, 2015).

#### PTSD-LTI as A Schema for Diagnosis

Developing an understanding of the nature of what is termed herein *Post-Traumatic Stress Disorder-LTI* (PTSD-LTI), opening the doors to this conversation and developing a therapeutic method addressed to those who suffer with this complex in the many forms it takes, this has been the over-arching purpose of our study.

What arose as our direct experience of our patients was a complex matrix of the potential impact of LTIs, identified in Table 1 as the basis of what needs to be addressed by a holistic, compassionate psychotherapy.

**TABLE 1:** PTSD-LTI-The Diversity of Traumatic Effects.

<p><b><i>How Has My Experience of a Life-Threatening Illness Made Me Different?</i></b></p> <ul style="list-style-type: none"><li>• <i>a view of its potential traumatic effects</i></li><li>• <i>as a rubric for self-reflection and examination</i></li></ul>
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- *with the goal of awareness, relief, clarity and peace through putting trauma in the past*

1) More afraid of...	<input type="checkbox"/> illness <input type="checkbox"/> being sick and invalided <input type="checkbox"/> germs and others as contaminating	<input type="checkbox"/> weakness <input type="checkbox"/> violation and objectification <input type="checkbox"/> feeling vulnerability and sensitivity
2) More self-conscious of...	<input type="checkbox"/> my appearance <input type="checkbox"/> my energy <input type="checkbox"/> my need to protect myself <input type="checkbox"/> how I eat and nurture myself <input type="checkbox"/> what I do and don't do	<input type="checkbox"/> my avoidances <input type="checkbox"/> my moods <input type="checkbox"/> my vulnerability <input type="checkbox"/> my selfishness and self-involvement
3) Loss and grief for my...	<input type="checkbox"/> my innocence <input type="checkbox"/> security of body and future <input type="checkbox"/> losing my old self, my old life	<input type="checkbox"/> leaving others behind <input type="checkbox"/> facing my death <input type="checkbox"/> losing my independence
4) My relations with other, I feel...	<input type="checkbox"/> envy for their health and well-being <input type="checkbox"/> their energy and vitality <input type="checkbox"/> fear of being hurt emotionally and physically <input type="checkbox"/> I don't want to hear what they think about my illness, or my chances for survival	<input type="checkbox"/> fear of what they think of me <input type="checkbox"/> fear of invalidation and being put aside, of being irrelevant <input type="checkbox"/> fear and react to hearing of their illnesses and problems
5) My sexuality and vitality: Effects on my	<input type="checkbox"/> libido <input type="checkbox"/> appearance <input type="checkbox"/> energy and movement, athleticism, staying fit <input type="checkbox"/> lack of interest in usual activities	<input type="checkbox"/> starting new interests <input type="checkbox"/> going out and to events <input type="checkbox"/> insomnia and sleep disturbances
6) Traumatic Effects and Manifestations...	<input type="checkbox"/> everything scares me <input type="checkbox"/> I am less trusting of myself and others	<input type="checkbox"/> I am suspicious of reassurance, explanation, and others' <input type="checkbox"/> I have nightmares—about being sick, dying,

	<input type="checkbox"/> I am less certain of my abilities <input type="checkbox"/> I am hyper-vigilant <input type="checkbox"/> I am sad, withdrawn and less enthusiastic <input type="checkbox"/> I am overly concerned about external order and my obsessions are too strong or out of control	objectivity—it is hard to believe what is told to me <input type="checkbox"/> I live inside myself—at a greater distance, and less intimately with others <input type="checkbox"/> I am in despair <input type="checkbox"/> I can't bear to hear about others' illnesses, recurrences and deaths	diagnosis, chemo, loss <input type="checkbox"/> I have vivid and intrusive recollections or my illness and its aftermath; or they are just below the surface and I am living in a sense, a cloud, of my past illness
7) My Future...	<input type="checkbox"/> Its reduced, I could have a relapse or die at any moment (conscious or pre-conscious) <input type="checkbox"/> I live in fear of relapse, recurrence and death <input type="checkbox"/> If I relapse, can I stand to go through another treatment? Would I be strong enough? Can I bear being so sick again?	<input type="checkbox"/> I am focused on preventing a relapse or future illness and become obsessed with how I believe I can do so. I may go to extraordinary ends and spend lots of money and time, knowing inside that I am fooling myself—or not knowing so. <input type="checkbox"/> I may lose my sense of what I value in life as I pursue remedies	<input type="checkbox"/> My career, finances and livelihood are affected and worry me <input type="checkbox"/> I worry more about my partner, family, friends and relatives <input type="checkbox"/> I worry about leaving a mark, being remembered, being important to others, being dismissed <input type="checkbox"/> I plan my demise, my funeral, the future of my dear ones—I am obsessed
8) Giving Up and Letting Go of my...	<input type="checkbox"/> security, however illusory it may have been <input type="checkbox"/> usual activities <input type="checkbox"/> a sense of immortality	<input type="checkbox"/> ambitions <input type="checkbox"/> desires <input type="checkbox"/> planning for my future	
9) My emotions: I feel...	<input type="checkbox"/> sadness <input type="checkbox"/> numbness <input type="checkbox"/> anxiety and panic attacks <input type="checkbox"/> obsessions/compulsions	<input type="checkbox"/> confusion <input type="checkbox"/> despair <input type="checkbox"/> irritability, anger and rage <input type="checkbox"/> blame/ self-blame/ I caused my illness	<input type="checkbox"/> what am I doing wrong now? <input type="checkbox"/> dependence <input type="checkbox"/> shame <input type="checkbox"/> avoidance <input type="checkbox"/> insomnia

	<input type="checkbox"/> madness moments		
10) I feel diminished in these ways...	<input type="checkbox"/> smaller	<input type="checkbox"/> have less memory	<input type="checkbox"/> more self-involved
	<input type="checkbox"/> weaker	<input type="checkbox"/> less pleasure	<input type="checkbox"/> less generous and concerned for others
	<input type="checkbox"/> damaged	<input type="checkbox"/> less interests	
	<input type="checkbox"/> less adept	<input type="checkbox"/> feel constricted	<input type="checkbox"/> isolative
	<input type="checkbox"/> less available	<input type="checkbox"/> more at home;	<input type="checkbox"/> loss of meaning'
	<input type="checkbox"/> less intelligent	agoraphobic; less	<input type="checkbox"/> loss of spirit
	<input type="checkbox"/> less ability to focus and concentrate	involved with the world outside	

**Table 2 Outline of the Proposed Basis for a Diagnosis of PTSD-LTI**

**Symptom Criteria**

With respect to the 10 symptom clusters in Table 1, symptoms from at least 3 clusters must be present with a minimum of 8 symptoms overall and a duration of at least 1 month.

*Specify duration and onset related to the LTI itself.*

There may be delayed expression of the symptom complex, but its referents are clearly to the illness, treatment or impact as per causation C. *Specify if delayed onset.*

<p>Exposure to a Life-Threatening Illness</p> <ul style="list-style-type: none"> <li>• Illness may be of any nature that causes a confrontation with the immediacy, or, the possibility of death.</li> <li>• Illness may be of a cancerous, infectious, cardiovascular, metabolic, neurologic, auto-immune, or other illness causation. It may be of acute or chronic nature.</li> <li>• There may be multiple exposures to the illness(s).</li> <li>• Life threatening traumatic injury would be considered under the established PTSD diagnosis.</li> </ul>
<p>Treatment of an LTI</p> <ul style="list-style-type: none"> <li>• The treatment itself may be the source of the trauma and/or additive to the trauma.</li> <li>• Treatment may be acute and/or chronic extending potentially into 'maintenance' phases.</li> </ul>
<p>Impact of the LTI</p> <ul style="list-style-type: none"> <li>• On social systems, family, disability, impaired functionality may be causative of PTSD-LTI.</li> <li>• At least 3 months of serious symptoms in this category is needed for a diagnosis; or may be prognostically assessed in terms of the duration of treatment</li> </ul>
<p>Relapse, Recurrence, Death and the possibility of further illnesses</p> <ul style="list-style-type: none"> <li>• Central foci of attention and anxiety and may, by the degree and strength of the concern, be causative of PTSD-LTI.</li> </ul>
<p>Relapse of prior PTSD from other trauma(s)</p>

**Note: The following criteria apply to adults, adolescents and children**



## Treatment of PTSD-LTI

With its wide variety of manifestations, the treatment of PTSD-LTI is an individualized matter. Yet, clusters of concerns emerge from personality, family, history, morality, religiosity, culture, gender, class, ethnicity and more. ‘Taking stock’ as life is threatened is one common path. So too is ‘denial’, even until the very end. So too is the great fear of cessation and non-being. As well as: who we are; who we feel ourselves to have been; peace or dissatisfaction; love or rage; or the mishmash of it all. Confusion is common to us and it comes and goes.

The compassionate non-judgmental work of being a therapist in such a crucible is many sided—moving, frustrating, loving, opening, patient, persevering, available, self-reflective, resonant, orchestrating, social working, family system conscious, and above all respectful of the differentiation of each of us. It relies on assisting in the access to each of our own desires for healing, connection, and realization (Carhart-Harris et al., 2018).

In essence, for PTSD-LTI patients, there is a relatively specific set of treatment outcomes that are desirable and are relevant to the diagnosis. These can be clustered as follows with ratings provided subjectively:

- Did your experience help you with recovery from the emotional effects of being diagnosed and treated for a life-threatening illness?
- Do you feel more vital?
- Are you able to feel more pleasure?
- Do you have a greater sense of peace?
- Did your experience help you to connect and integrate with the important others in your life?
- Did your experience help you with your fears of death and dying?
- Did your experience help you think about and plan for what you consider your remaining life span?
- Have you been able to find and give meaning to your remaining life?
- Do you feel you have made peace with the possibility of having a limited future?
- Have you been held by or found a spiritual or religious path?
- Have you been helped in planning for future treatment options and for your ultimate death?
- Do people in your life notice a difference in you in these ways and other ways?

While the improvements as expressed by the assessment measures used in our study certainly indicate these issues being addressed, it was in the therapeutic work with our subjects over the many days of contact in which these concerns were delineated and assistance rendered. Our study highlights the need for more sensitive measures that reflect the manifestations of PTSD-LTI and allow for assessment of the benefits of treatments for this difficult state. It also supports the benefit of an intensive psychotherapeutic approach applied within a brief therapy context. The six-month follow-up assessment and psychotherapy session validated the continuing impact of our MDMA Assisted Psychotherapy and is in sharp contrast to the usual 8-week evaluative

period for antidepressant trials. It argues for the intensity of contact between therapists and subjects as a cost-effective process.

Rarely do psychiatrists and therapists write or speak of the exhilaration of having the opportunity to work intensively with their patients. The success of our study is reflected in the deeply moving experience of working with our subjects as well as in the outcome measures. To succeed in psychotherapy, therapists must find compassion, respect and understanding for their patients—at least to some extent. MDMA assisted psychotherapy brought us into intimate contact with the deepest of life's struggles. While maintaining a therapeutic stance, we also participated in the intimacy of a shared human experience that touches us all.

### **Conclusions and Relevance**

PTSD-LTI is an epistemological entity recognizing and describing the potential trauma that often results from being diagnosed with a life-threatening illness and the aftermath that occurs with treatment. There are impacts on cognition, interpersonal connections, disability and the challenges of resuming a life course that has been significantly interrupted. Framed within this schema, the situation of these individuals and their significant others can be appropriately addressed. Given the increasing numbers of people faced with the aftermath of an LTI who often go on to a traumatized state of mind as they continue life with the threat of recurrence and death, it behooves medicine to focus on the wider effects of our ability to prolong life and the emotional/spiritual consequences to individuals, families, communities and society at large. Prophylaxis to prevent PTSD-LTI should commence with first diagnosis as supportive psychotherapy for the individual, their family and should include community interventions as necessary. This support would continue to be available over the course of treatment and as needed during recovery and return to functionality and well-being.

Development of treatments for PTSD-LTI is an imperative for medicine and for our societal health. MDMA Assisted Psychotherapy for PTSD-LTI shows great promise in this regard.

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