

Stress Points

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STRESS POINTS is the official electronic journal of the Australasian Society for Traumatic Stress Studies (ASTSS)

Stress Points is a quarterly ejournal produced by the Australasian Society for Traumatic Stress Studies (ASTSS). It aims to report and examine current developments in research, theory, clinical practice, social policy and inquiry in the field of trauma and posttraumatic mental health. Stress Points endeavours to be a forum for the multi-disciplinary exchange of ideas on posttraumatic mental health, with contributions and dissemination beginning with ASTSS members. Members and non-members can make contributions in the form of feature articles, reviews, interviews, research reports, meta-analyses or opinion pieces – all with the primary focus of trauma.

All contributions must be consistent with the stated mission of ASTSS: (1) to advance knowledge about the nature and consequences of highly stressful events, (2) to foster the development of policy, programs and service initiatives which seek to prevent and/or minimise the unwanted consequences of such experiences, and (3) to promote high standards and ethical practices in the trauma field. Furthermore, Stress Points serves as a major vehicle towards the goals of ASTSS: (i) providing quality services to ASTSS members, (ii) encouraging networking and development of ASTSS within the Australasian region, (iii) promoting standards of excellence in trauma research and practice among members, (iv) pursuing dialogue and links within the international trauma community, (v) encouraging exploration of different paradigms in research and practice, (vi) exploring the role of prevention in traumatology, (vii) seeking to influence the way traumatology is addressed in public policy and the media, and (viii) pursuing a role within the non-professional community through consultation and education.

Submissions are to be emailed directly to the editor at btar2399@bigpond.net.au. Address other correspondence to Bronwyn Tarrant, Stress Points Editor, ASTSS, Greenview Mental Health, Suite 9, 20 Commercial Road, Melbourne, Victoria, 3004.

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FROM THE PRESIDENT

DOUG BREWER

Greeting members,

As we move into our winter period, many members have been busy planning our 17th Australasian Conference on Traumatic Stress (ACOTS) to be held in Perth WA on 6th – 8th September. This biannual conference, jointly hosted by ASTSS and the Australian Centre for Posttraumatic Mental Health (ACPMH), is shaping up to be another excellent event where we can gain and share knowledge and meet with others interested in the field of trauma.

This year's conference title, "Trauma and Disaster: Complexity, Diversity, & Recovery" captures the essence of the widespread impact of trauma in all its forms that as has been reported in the media over the past few years. We have witnessed countless disasters here in Australia and have seen the incredible resilience of those affected by fire, flood and earthquakes. We are reminded daily of the traumatic events that impact the lives of those around us, violence, accidents, war and illness. I have also noticed that there seems to be an increasing portrayal of the impact of posttraumatic stress in movies and TV story lines. Exposure to trauma one way or another seems to be unavoidable and so the focus of this year's conference seems very timely.

We are hoping to have podcasts of interviews with our three keynote speakers, 'to whet your appetites' available on our website shortly, and details of workshops and tutorial topics are also available on the registration booklet. Due to a strong response to our call for papers, we have increased the number of parallel symposia from three to four. All the signs point to another excellent conference.

On the social side, the conference will commence on the Thursday evening with complimentary welcome drinks and entertainment by the acclaimed Dolce Ensembles String Trio. Friday evening we will travel by bus along the riverside to the conference dinner at the Esplanade Hotel in historic Freemantle. There will be plenty of options for partners to explore Perth and its surrounds while the conference is in running. The Parmelia Hilton is centrally located, so take this opportunity to see Perth at its best in Spring.

This conference will also mark the handing over of my role as President to Professor Justin Kenardy President elect at the AGM to be held on Friday 9th September at 5:00pm. I have over the past two years been privileged to represent ASTSS on the Board of the International Society for Traumatic Stress Studies (ISTSS) and have taken part in helping ISTSS become more globally focused and representative. Having just returned from the 5th World Congress on Traumatic Stress in Mexico City and the mid-year board meetings of ISTSS, I am excited to announce that there has been an agreement in principal to move towards a closer relationship between the many affiliated organisations (such as ASTSS, JSTSS [Japan], ESTSS [European], SAPsi [Argentinian], Cpastss [Canadian]) and ISTSS, to create a united global association that has the capacity to

better represent internationally the developments in the field of trauma studies and policy.

The first stage of this transition will be to offer a free 'no charge' special membership to ISTSS for all members of affiliated organisations. This proposal will mean that when you join ASTSS as a member, you will also join ISTSS as an affiliate member 'no charge' and have access to discounted conferences, webinars, ISTSS publications, etc. You can also elect to pay an additional sum to upgrade to a full member of ISTSS and this would give you voting rights and access to the 'Journal of Traumatic Stress'. There will be more details regarding this development following the inaugural meeting of the Global Delegates in Los Angeles in November this year.

Back home in Australia, we have been treated to an increasing array of international speakers, conferences, workshops and the like over the past few years, promoted by an increasing number of organisations interested in the trauma field. I think it is timely that we look again at our own mission statement and our position in the field.

ASTSS provides a forum for extending the understanding, prevention and treatment of major stress and trauma within the Australasian region. ASTSS is committed to: (1) Inclusiveness of all i.e. disciplines and professions, ethnic origins and cultures, levels of involvement in trauma work, and trauma interests and research orientations; (2) Effective communication with the community and within the society; (3) A climate of open dialogue on all aspects of trauma at research and clinical practice levels.

Our mission is simply threefold:

1. To advance knowledge about the nature and consequences of highly stressful events.
2. To foster the development of policy, programs and service initiatives which seek to prevent and / or minimise the unwanted consequences of such experiences.
3. To promote high standards and ethical practices in the trauma field.

Now more than ever before it makes sense to continue your membership with ASTSS. We have an exciting conference in Perth that is in keeping with our mission, we have some very renowned international speakers lined up for 2013, a completely new website, and the offer of free membership to the largest international association of like-minded people.

I look forward to meeting with you this September in Perth.

Doug Brewer
President ASTSS.



ASTSS

Advancing Trauma Recovery and Research

Australasian Society for Traumatic Stress Studies

GUEST EDITORIAL

BY: JUSTIN KENARDY

The experience of a first onset psychotic episode can be profoundly traumatic for a young person. The fear, distress and uncertainty associated with the experience certainly can be overwhelming, and may well stay with the person after the episode has resolved, but may be overlooked in the context of the psychosis. This is similar to the situation I find in my work of individuals who find themselves admitted to intensive care where physical recovery is, I would argue, rightly viewed as the main criterion of success but where the psychological trauma is overlooked. It is sometimes hard to raise the issue of psychological outcomes as it can be seen as “symptom seeking”, a criticism that has been levelled against the DSM-V.

However there is another way in which trauma can affect serious mental illness, and that is through the role of childhood adversity. A series of studies in the US have documented the impact that childhood trauma and adversity can and does have on the incidence of psychiatric disorder as the child becomes an adult. Whilst many, in our work about 9 out of 10, children will either traverse adversity with little psychological impact or experience short-term distress that resolves, 1 in 10 will not be so lucky. These rates vary according to the traumatic experience, for example sexual and physical abuse is associated with greater impact and more frequent subsequent psychiatric disorder. These disorders can include psychosis, depression, anxiety disorders, and personality disturbances. But the impact is most often presenting initially as post-traumatic stress.

Children may not be in a position to recognise this as a problem for which they can receive help. Equally the parents are not ideal judges of the child’s internal experience and so will overlook what is going on within the child. When the impact of that trauma changes its expression to problems with attention, school performance, or social behaviour the parents and teachers may not recognise the link to the trauma. If these problems become entrenched they can have a flow on effect to family, friends and social network, and to generally successful development through adolescence and beyond.

Greater awareness of the psychological impact of adversity and better understanding of initial vulnerability to the impact and ongoing amplification of the impact is vital to allow us to intervene effectively to prevent the profound and long-term disability. This includes a much greater consideration of childhood as a time when the seeds of the adult psychological health are sewn.

Professor Justin Kenardy
ASTSS President Elect 2012



PROLONGED GRIEF DISORDER: DEVELOPMENTS IN DSM AND ICD

BY: RICHARD BRYANT

For many years persistent grief reactions have been quarantined from formal psychiatric diagnosis. Although persistent grief reactions have been noted for centuries, along with the impairment that it can cause, there has been a long-held tradition that it holds a unique place in mental health because it is an experience that nearly all people will experience at some time in their lives. For example, the American Psychiatric Association's Diagnostic and Statistical Manual for Mental Disorders (DSM-IV) has excluded grief as a disorder because it recognises grief as "an expectable and culturally sanctioned response to a particular event". Accordingly, the major psychiatric diagnostic systems have avoided the risk of medicalising this common human response to loss.

In contrast to this tradition, both the American Psychiatric Association's Diagnostic and Statistical Manual for Mental Disorders (DSM-5) and the World Health Organisation's International Classification of Disease, Eleventh Revision (ICD-11) are independently introducing a new diagnosis of persistent grief. Persistent grief is described in DSM-5, due to be released in 2013, in the proposed Adjustment Disorder Related to Bereavement. In ICD-11 it is described in a separate diagnosis as Prolonged Grief Disorder. The diagnostic definitions are marginally different, with DSM-5 providing more specific detail than ICD-11. DSM-5 defines the construct as persistent grief reactions that persist for at least 12 months after the death of a close relative or friend in which the bereaved experiences intense yearning, emotional pain, or preoccupation with the death on most days. Further, the grief response can be accompanied by difficulty accepting the death, anger over the loss, a diminished sense of one's identity, a feeling that life is empty, and problems in engaging in new relationships or activities. ICD-11 adopts a very similar position except that it only requires the grief reactions persist for at least six, rather than 12, months.

There is considerable evidence that whereas strong grief responses are typical in the acute weeks and months following bereavement, most people who continue to experience severe grief responses beyond six months are likely to continue to suffer ongoing grief and associated impairment (Maciejewski et al., 2007, Prigerson et al., 2009 and Latham and Prigerson, 2004). Despite the

evidence that six months appears to be a common timeframe to demarcate between transient and persistent grief reactions, DSM-5 has proposed a minimum 12 month delay since the death before making a diagnosis because it adopted a cautious approach to avoid prematurely diagnosing bereaved people. Previous studies estimate that 10%-15% of bereaved people may suffer this condition (Prigerson et al, 2009, Latham and Prigerson, 2004, Barry et al., 2002 and Bonanno and Kaltman, 2001), although higher rates been reported following traumatic deaths or death of children (Neria et al., 2007 and Meert et al, 2011). In Australia alone, there are an estimated 70,000 new cases of prolonged grief per year; this figure highlights the public health issue that prolonged grief represents to the community.

Announcement of this new diagnosis has been met with considerable controversy for a number of reasons. The most common concern about the diagnosis is that it medicalises human grief; it is argued that the emotional pain associated with grief is a ubiquitous condition and psychiatry should not prescribe any limits on the trajectory of grief. It is also argued that grief is managed differently across cultures and accordingly no one diagnostic system can fully capture the varieties of grief response across cultures. Relatedly, grief is closely linked to religion and these rituals should be respected by psychiatry. Many commentators have also noted that grief is adequately described by diagnostic categories of anxiety and depression, thereby making the grief diagnosis redundant.

Despite these criticisms, it appears that the proposed diagnoses will proceed because of solid evidence that outweighs the criticisms noted above. Factor analytic studies have repeatedly shown that the yearning response, which is the key element of prolonged grief, is distinct from anxiety and depression, and contributes to impairment suffered by these individuals (Boelen et al, 2010). A critical rationale for introducing the diagnosis is the overwhelming evidence that people with prolonged grief suffer psychological, social, health, or occupational impairment; these problems can include psychological problems (e.g., depression, suicidality, substance abuse), poor health behaviors (e.g., increased tobacco use), medical disorders (e.g., sleep disturbance, high blood pressure, elevated cancer rates, increased cardiovascular

disorder), and functional disability (Lichtenthal et al., 2004). The criticism offered concerning cultural factors is countered by evidence that the construct has been demonstrated across a widerange of cultures, including non-western settings, as well as across the lifespan (Lichtenthal et al., 2004 and Shear et al., 2011). Supporting the distinctiveness of the grief condition, there is evidence that prolonged grief is characterised by distinctive predictors, neural dysfunctions, and cognitive patterns associated (Shear et al., 2011).

Arguably the strongest rationale for the new diagnosis concerns treatment. Whereas bereavement-related depression responds to antidepressant interventions, grief reactions do not (Prigerson et al., 2009). Instead, psychological treatments that are specifically focused on prolonged grief responses have been shown to reduce the central symptoms - more so than psychotherapies shown to be effective for depression such as interpersonal psychotherapy (Shear et al., 2005 and Boelen et al., 2007). This treatment includes reliving the death, communicating outstanding issues with the deceased, cognitive restructuring, goal setting, initiating new activities, and nurturing positive memories. Together, this evidence suggests that at present there are many grieving patients who are inappropriately being prescribed antidepressant or anxiolytic medication. A diagnosis that facilitates patients being directed towards treatments that can effectively reduce the impairment experienced by millions of people worldwide appears warranted.

Clinicians wishing to determine a prolonged grief diagnosis can use the Prolonged Grief- 13 (PG13) (Prigerson and Maciejewski, 2007), which is the most widely used scale for the condition. It comprises 13 questions pertaining to the core symptoms of prolonged grief, as well as the impairment that the symptoms cause. Clinicians should be advised, however, to be mindful of depression and anxiety when making diagnostic decisions. Both depression and posttraumatic stress disorder are common following bereavement and can be comorbid with prolonged grief. Depression is especially common in cases where the bereaved person loses many of the common positive reinforcements and activities that existed prior to the death, including loss of social connections, positive activities, and income. When one identifies patients who do meet the criteria for prolonged grief disorder, it is strongly recommended to use cognitive behaviour therapy as the frontline of treatment.

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Note. Richard Bryant serves on the DSM-5 PTSD/Trauma/Dissociative Work Group and the ICD-11. These comments do not necessarily reflect those of the DSM-5 or ICD-11 Work Groups.

Professor Richard Bryant PhD
School of Psychology
University of New South Wales,



PROMOTING RECOVERY, AVOIDING 'SANCTUARY HARM': THE POTENTIAL ROLE OF TRAUMA INFORMED APPROACHES IN SERVICE DELIVERY FOR PEOPLE DIAGNOSED WITH SERIOUS MENTAL ILLNESS.

BY: CATH ROPER

This paper focuses on trauma and the category of people diagnosed with serious mental illness (SMI) which generally includes schizophrenia related disorders, affective disorders and severe depression. People diagnosed with SMI often use mental health services involuntarily, meaning they are governed by separate mental health laws and may be detained and treated without consent as inpatients in public mental health settings. Two aspects relating to experience of trauma in this group are explored. The first is evidence that rates of exposure to trauma in both childhood and adulthood and also rates of post traumatic stress disorder (PTSD) are higher in this group of people than in the general population. The second is emerging evidence that people diagnosed with SMI may be exposed to 'sanctuary trauma' and 'sanctuary harm' when they are inpatients of mental health services. It is argued this evidence points to the urgent need for introducing trauma informed approaches to care. An underlying critique is that diagnostic categories including SMI are ways of obscuring and marginalising trauma experience whereas there is an urgent need for mental health services to respond to trauma experience in all people seeking help. Although outside the scope of this paper, it should be noted that many people who have experienced trauma may seek out public mental health services but are refused access on grounds that their distress is not 'serious' enough.

Background

Lifetime exposure to trauma in the population of people diagnosed with SMI

Individuals categorised as having SMI report higher rates of trauma and assault than the general population (Borckardt et al, 2011; Auxemery & Fidelle, 2011). Studies reveal trauma exposure in this population ranging from 49 to 100% including high rates of physical and sexual assault across the lifespan (Cusack et al, 2006; Freuh et al, 2005; Grubaugh et al, 2011). Some studies show up to 98% of people diagnosed with SMI have experienced DSM-IV trauma defined as experiencing, witnessing, or being confronted with event(s) that involve actual or threatened death, serious injury or threat to the physical integrity of self or others and where the person's response involves intense fear, helplessness or horror

(Robins et al, 2005). A review of studies of child abuse in women inpatients found incidence rates of 69% and rates for men were 59% (Read et al, 2005) while reports of childhood sexual assault (CSA) range from 12 - 50% (Harper et al, 2008).

Exposure to trauma and PTSD

Prevalence rates of PTSD among those categorised as having SMI are estimated at up to 43% (Grubaugh, 2011; Robins et al, 2005; Freuh et al, 2005). It is known that adults with histories of abuse including emotional, physical and sexual frequently present with PTSD symptoms (Harper, 2008). Known risk factors for the development of PTSD in adults include childhood trauma, current psychiatric symptoms, perceived coercion, and relationships with mental health service providers. Both psychosis and psychiatric admission have the potential to act as events precipitating PTSD symptoms (Beattie et al, 2009). Despite this, it is not routine in public mental health services to assess for either trauma or PTSD and documentation of both are exceptionally low in patients' medical records suggesting both may be overlooked (Cusack et al, 2006).

Exposure to trauma and Voice Hearing

It is estimated that around 75% of people diagnosed with schizophrenia related disorders experience auditory hallucinations or voice hearing (VH) (Choong et al, 2007), while VH has been reported in up to 50% of people diagnosed with PTSD (Steel et al, 2011). Not all people experiencing VH have been exposed to trauma and not all people who have experienced trauma experience VH. Nevertheless, there are complex associations between trauma and VH that are poorly understood. VH is currently understood as a feature of psychosis and considered a classic symptom of schizophrenia, however recent systematic reviews have begun to show that there may be a causal relationship between experience of trauma, particularly in childhood, and the development of VH (Read et al, 2005). For example, quantitative studies and numerous first person accounts indicate that CSA does play a causal role in the development of VH (McCarthy-Jones, 2011). A critical review of studies examining the relationship between VH and CSA found that 56% of psychiatric patients with CSA reported

VH, and at least 21% of the general population with CSA reported VH (McCarthy-Jones, 2011). Additionally, studies of VH content showed links between the content of voices and the content of CSA with voices mirroring past perpetrators, in some voice-hearers (Read et al, 2005; McCarthy-Jones, 2011). Rather than consider VH as meaningless symptoms of mental illness, there is a movement towards attempting to better understand the complex associations between trauma and VH (McCarthy-Jones, 2011). Because VH crosses diagnostic categories, it has been argued it should be considered a 'complaint' rather than pertaining to any particular diagnosis (Bentall, 2006 in McCarthy-Jones, 2011). More recently it has been suggested that VH may be more appropriately understood as a dissociative rather than a psychotic disorder, occurring in response to trauma for which clinical approaches that recognise personal meaning-making are needed (Longden et al, 2012) .

Overlooked trauma

It is possible that a diagnosis formed on the basis of presenting symptoms such as hallucinations, sleep disturbance, hyper vigilance and paranoia could overlook an underlying trauma. Trauma is under-recognised and under-treated in people categorised as having SMI (Grubaugh et al, 2011; Read et al, 2005) as is PTSD (Cusack et al, 2006; Steel, 2011). One difficulty is that symptoms of PTSD and those of psychosis are approached separately rather than understood as a co-morbid presentation (Auxemery & Fidelle 2011) even though an estimated 30% of people diagnosed with schizophrenia will also have co-morbid PTSD (Cusack, 2006) and even though it is clear that the symptoms overlap (Grubaugh et al, 2011). There are complex associations between childhood trauma, lifetime exposure to trauma, VH and PTSD that are prevalent in people categorised as having SMI – the same people who are frequently involuntary patients of public mental health services. To this complexity must now be added the concepts of 'sanctuary trauma' and 'sanctuary harm' which describe physical, psychological and emotional injuries acquired through using mental health services.

Sanctuary trauma

People categorised as having SMI are vulnerable to additional traumatic or iatrogenic experiences that occur within psychiatric settings (Hammer et al, 2011; Freuh et al, 2005; Bonner, 2002). Legislated contexts contribute to this vulnerability because they permit intrusive actions that are against a person's will and the person cannot choose to leave. The term 'sanctuary trauma' has been coined to describe incidents within inpatient

settings that meet the DSM-IV criteria for a traumatic event while 'sanctuary harm' refers to harms associated with an inpatient stay.

During the months of September and November, 2011 the Age newspaper ran several investigative articles revealing alleged exposure to harms, trauma and unsafety in Victorian mental health services including alleged serious sexual assaults in inpatient units, with victims allegedly unsupported and protocols not followed (Baker & McKenzie 2011a). Of two patient deaths (not suicide) occurring as a result of being treated in Victorian inpatient units, one was allegedly due to overmedication and one allegedly occurred when an inpatient asphyxiated after being physically held down on the floor by security officers in a position where he could not breathe (Baker & McKenzie, 2011b). This intervention is known informally as a 'take down', a violent practice usually involving several people, because the objective is to subdue the patient physically. Allegedly, coercive practices such as threatening patients with seclusion as a way to control behaviour and failing to give secluded patients access to toilets were not uncommon in some inpatient units (Baker & McKenzie, 2011b).

Violence is common in psychiatric inpatient units (Bonner et al, 2002). Among potentially violent events are routine institutional practices such as seclusion and restraint (Borchardt et al, 2011). Restraint is when staff physically lay hands on an inpatient during the management of an untoward incident (Hammer, 2011). Seclusion is "the sole confinement of a person at any hour of the day or night in a room of which the doors and windows are locked from the outside" (Mental Health Act Victoria, 1986, S82:1). Distressing events can also retrigger disturbing or traumatic events from the past in staff and patients alike (Bonner et al, 2002). The use of seclusion and restraint with inpatients who have histories of childhood trauma may result in retraumatization (Hammer, 2011). For example, it has been documented that "many survivors [of abuse] reported personal experiences with abusers who had restrained them [and] locked them away in closets, car trunks, and rooms" (Carmen and Rieker, 1998:92 in Hammer, 2011:568). Studies also show that people who have experienced sexual assault, physical or other abuse in childhood have longer and more frequent hospital admissions; are more frequently secluded, spend longer in seclusion; receive more medication; are more likely to self-mutilate and more likely to try to kill themselves than non abused psychiatric patients (Read et al, 2005). One study found that among a class of inpatients who had been exposed to the highest levels of seclusion and restraint 70% had a history of child abuse (Hammer, 2011). Other studies have reported a high proportion of

witnessing aggressive incidents or traumatic events while an inpatient whether these are interactions between staff and patients or inter-patient (Grubaugh et al, 2007; Freuh et al, 2005).

Sanctuary trauma and harm may also be associated with development of or exacerbation of PTSD symptoms (Bergk et al., 2010; Ladois-Do et al, 2012). Recent findings suggest that people diagnosed with SMI might develop PTSD symptoms after being exposed to distressing events during an inpatient admission with a risk of the symptoms being present 5 weeks later (Ladois-Do et al, 2012). Extreme distress in the week following a distressing experience of seclusion and or following a police escort, handcuffed arrival to hospital has been reported by patients with events still bothering them a month or more after discharge from hospital (Freuh et al, 2005; Grubaugh et al, 2007). This too, is an under researched area so little is known about the longer term effects of sanctuary trauma and sanctuary harm.

Sanctuary harm

Seclusion and restraint are perhaps extremes on a continuum of the coercive practices that inpatients may be exposed to but many other routine procedures such as admission processes, surveillance, lack of privacy, the going through and confiscation of personal items, being on a locked unit, taking unwanted medication, being sedated, loss of control, are highly distressing or traumatic (Grubaugh et al, 2007). Consumers have reported threats of physical violence, having medication used as a threat or punishment, being threatened with seclusion, the arbitrary nature of the rules, perceived poor interactions with clinicians, not being treated as an individual, lack of fairness, and experiencing disrespect or embarrassment in acute hospital settings (Robins et al, 2005). Consumers report experiencing emotional pain, helplessness, fear, isolation and shame and feeling unsafe as a result of sanctuary trauma (Freuh et al, 2005). At the same time, staff may be unwilling to discuss harmful, traumatic or frightening experiences with patients when they occur in inpatient settings and debriefing opportunities may not be provided (Grubaugh 2007). Such service failures potentially perpetuate human suffering and continue the trauma cycle (Hammer, 2011). The high incidence of lifetime exposure to trauma in the category of people diagnosed as having SMI, and risks that psychically vulnerable individuals are retraumatized through service responses to their distress, provide powerful arguments for making the paradigm shift to trauma informed care. Models of care are needed where the individual's experience of trauma, not 'degrees of seriousness' or diagnostic categories, takes precedence.

Trauma informed approaches in acute settings (based on Hucksthorn et al, 2004)

Many researchers and practitioners are arguing for the need to assess for trauma in every person who presents for help. In a trauma informed approach the focus is on the traumatic event, not on the person who may or may not experience stress from the traumatic event. This marks a change from an epidemiological perspective to one that focuses on the situation, context and event itself. The approach asks: what happened to you, instead of assuming there is something "wrong" with you. Trauma informed models of care begin by using trauma assessments which establish whether the trauma is current or historical, what the nature of the trauma was, what the immediate safety needs are, and then all care planning stems from this. Approaches include: having one person conduct the assessment; mapping out possible retriggerers; the use of advance directives outlining the person's preferences which are then used to guide care; keeping the locus of control with the patient and awareness that hospital can be retraumatizing.

If a service is to assess for trauma, it has to be able to provide a suitable clinical response. A full organisational commitment to providing trauma informed care is necessary. All staff are trained in trauma approaches and additional expertise is made available as needed. All staff can access high quality supervision and unit culture is constantly attended to.

Specific interventions include the use of trauma assessment tools; training staff in the effects of trauma and making advocacy and trauma informed counselling available to consumers. 'Sensory carts' filled with objects that provide items for self-soothing (pictured) and weighted blankets to wear that give a sense of safety and security are available if consumers are feeling distressed or vulnerable rather than resorting to coercive measures. Any instance of seclusion is regarded as a system failure triggering a formal sentinel event response and debrief.



Hearing voices approach

The hearing voices approach is trauma informed, deriving from the work of social psychiatrist Marius Romme and journalist Sandra Escher. The approach demedicalises voice hearing experience, instead assuming it is meaningful and focusing on the relationship a person has with their voices (Longden et al, 2012). Detailed voice profiling examines such questions as how many voices there are, when they first emerged, what sex and age they are, what is said and when. In this approach the voice hearer accepts the reality of the voices, and takes back responsibility and control over distressing voices through strategies such as negotiation. Intentional peer support based on voice hearing approaches is flourishing here (see Voices Vic for a local example - http://www.prahra.nmission.org.au/hearing_voices.htm) and internationally. This approach can be used in acute settings by intentional peer support workers who experience VH or by clinicians. In the community, ongoing access to these and other forms of intentional peer support should form an important part of the range of available services in any recovery oriented mental health service system

Conclusion

Taking our lead from the US, Australian states including Victoria have instituted policy and practice guidelines to make reduction of seclusion and restraint a priority but trauma informed care, integral to these efforts in the US remains a distant goal here. When there is a failure to attend to underlying trauma important opportunities for healing are missed. Trauma continues to be overlooked and inpatient services may replicate original trauma or expose patients to new trauma. The overwhelming evidence of rates of lifetime exposure to trauma experienced by people categorised as having SMI; the need to avoid exposure to sanctuary trauma and harm and the need to respond adequately to trauma experience for all people seeking help suggest that mental health services should be predicated on trauma informed approaches.

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Cath Roper
Consumer Academic,
Centre for Psychiatric Nursing,
University of Melbourne



Over a ten year period, Cath Roper experienced multiple involuntary hospitalisations to mental health services

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A HISTORY OF ELECTROSHOCK THERAPY: A TED TALK

BY: SHERWIN NULAND



Dr Sherwin Nuland delivered an opinion-changing speech on the history of ECT, which appeared on the worldwideweb. Nuland's oration continues to challenge the stereotypes of ECT.

Click the picture to view Dr Sherwin Nuland's Ted Talks.

FROM TRAUMA TO TREATMENT: A BRIEF HISTORY OF MODERN ELECTROCONVULSIVE THERAPY

BY: PAUL LEONARD

Electroconvulsive therapy (ECT) has a chequered history and is most often portrayed very negatively by popular media and film (Kramer, 1999). Perhaps as a result of this largely adverse exposure, ECT is often seen as a traumatic, even barbaric, procedure and not one that should be used in a modern psychiatric setting (McDonald & Walter, 2009). But should this be the case? Through review of contemporary and historic accounts of Australian and international ECT this paper will explore the roots of the treatment's negative reputation and highlight the positive impacts that ECT can have for those suffering severe mental illness.

The origin of ECT was the observation that patients who had a mental illness and had suffered an epileptic seizure often had improved mental illness symptoms after the seizure (Baran, Bitter, Ungvari, Nagy, & Gazdag, 2008). The discovery of this phenomenon was attributed to László Meduna, a Hungarian neuro-psychiatrist who, in 1934, began the first course of convulsive therapy for schizophrenia using intramuscular injected camphor oil to cause a seizure (Baran, et al., 2008). Meduna documented several successes with his treatment, however he also reported difficulty in determining appropriate levels of dosing with camphor oil (Baran, et al., 2008). Other chemical compounds were used in an attempt to induce seizure but, as with camphor oil, dosing was very much an "art" and many patients suffered further consequences from increased agitation waiting for a seizure that didn't take place through to a coma and/or death due to overdose (Aruta, 2011).

A more controlled way of inducing a seizure needed to be found. Equipped with the knowledge that an induced seizure could assist the mentally ill, Cerletti and Bini – an Italian professor and student pair – designed and built an "electro-shock" apparatus in 1938 that was intended to invoke a seizure (Aruta, 2011). Cerletti claimed it as a major advance in terms of being able to control seizure induction and a case, documented by an eye-witness Ferdinando Accornero, records Cerletti's success at doing just that (Aruta, 2011). However, a study by Roberta Passione of Bini's own notebooks revealed that it wasn't so straightforward (Aruta, 2011). Passione discovered that there had been at least three attempts to shock the

patient into a seizure, each with a higher voltage until the desired outcome was achieved (Aruta, 2011). The patient was not anesthetized and felt full onslaught of the shocks (Aruta, 2011). Anyone bearing witness to this traumatic procedure would have been likely to have, at least secretly, thought it inhumane as the patient cried out to be not subjected to the "bite of death" (Aruta, 2011).

Australia began using ECT in 1941 (Goldney & Adams, 2009). It was wartime and electrical equipment was difficult to import, so Dr Hugh Birch of the Glenside Hospital in South Australia built a machine himself (Goldney & Adams, 2009). His was the first use of such an apparatus in Australia and he published the results in the *Medical Journal of Australia* (Goldney & Adams, 2009). Despite ECT being delivered by Birch without any anaesthesia, his accounts describe good acceptance by the patients (Goldney & Adams, 2009). This could possibly be attributed to both the effective treatment results and the certainty of the electrically induced convulsion over the anxiety of waiting for chemically induced seizures to occur (Goldney & Adams, 2009). Again, for any of the general public that may have had any exposure to the procedure, it is likely to have been perceived as barbaric and inhumane, further contributing to the traumatic history of ECT.

These negative and more gruesome attributes of ECT are perpetuated in modern media. Movies such as "One Flew over the Cuckoo's Nest" depict ECT as a brutal intervention designed to control and suppress an individual's personality (McDonald & Walter, 2009). McDonald and Walter (2009) conducted a study of twenty-two currently available films released since the 1940s and found that only two portray ECT as a path to recovery without serious side effects. In fact, most of the films show ECT as a painful and degrading experience that generally results in zombification of the patient with significantly reduced quality of life, or results in death (McDonald & Walter, 2009). Given society's general appetite for the historical macabre – one only has to consider our fascination with "Jack the Ripper" for an example – and the overriding negative depiction of ECT in film, it is no wonder that general society with no personal or professional exposure to the treatment are likely to be at the least disapproving (McDonald & Walter,

2009) of this “traumatogenic” treatment. Yet, with such a gruesome background, it is very difficult to imagine how ECT manages to survive as a modern therapy if it is not effective. Indeed, if one considers only the history and the media portrayal ECT could seem more traumatic than the illnesses that it strives to address. Studies have shown that ECT is possibly more effective than psychopharmacology in the treatment of some relentless mental illnesses (Gomez, 2004). Current day indications for ECT include major depression, bipolar disorder and schizophrenia (Gomez, 2004). Gomez (2004) cites a number of studies that have shown ECT’s effectiveness and points to evidence that suggests ECT is the most appropriate treatment for unipolar major depression (Gomez, 2004). Due to ECT’s relative reliability of outcome and its comparatively rapid action, American treatment guidelines recommend ECT as the treatment of choice for depression with severe suicide risk (Gomez, 2004). Controlled trials have consistently found ECT to be at least as effective as drugs in treating major depression, and that ECT works faster to realize significant improvements – measurable improvements in two to three weeks instead of the six to eight that drugs often take [1]. Trials have also shown ECT to be an effective treatment for mania and schizophrenia [1].

ECT has long term positive effects. A recent study conducted in British Columbia retrospectively reviewed 90 patients with mood disorders that were predominantly (86.5%) rated as either “markedly ill” or “among the most extremely ill” according to the Clinical Global Impression (CGI) scale (Mathew et al., 2007). The study reviewed the patients prior to ECT then at 6 months, 1 year and 2 years after ECT and evaluated the individuals on CGI, Global Assessment of Functioning (GAF) and Social and Occupational Functioning (SOF) assessment scales (Mathew, et al., 2007). All of the ratings improved during follow up time interval and after two years 56.6% of the patients were rated as either “much improved” or “very much improved” on the CGI scale and exhibited similar improvements on the GAF and SOF scales (Mathew, et al., 2007). Mathew, et al., (2007) observes that these changes were stable over the two year follow up period and provide evidence that ECT had been a very effective treatment for over half of the patients in the study group. Although Mathew, et al., (2007) did not conduct this study with a control group, so it is possible that the psychosocial gains could have been attributed to other than ECT, there are many other studies that have demonstrated the efficacy of ECT using a double blind research method (Reisner, 2003). Reisner (2003) conducted

a literature review that found ECT produced a positive improvement in five of the six controlled trials that were studied of patients with major depression being treated with ECT. Another UK based study found that improvements in quality of life and general cognitive ability occurred rapidly and were measurable two and four weeks after ECT (McCall, Dunn, & Rosenquist, 2004).

A recent Australian study investigated the outcomes for aged patients in terms of the impact of ECT maintenance therapy on recurrent major depression and bipolar disorder (O’Connor et al., 2010). The patients, 93% major depression and 7% bipolar, were typically profoundly disabled, psychotic and suffered psychomotor retardation and suicidal ideation. The study defined ECT maintenance therapy as ECT treatments given at least monthly for a period of six or more months to treat chronic depression (O’Connor, et al., 2010). The population that was studied were patients admitted to Victorian public aged psychiatry units on either a voluntary basis or under an Involuntary Treatment Order (ITO) (O’Connor, et al., 2010). The average age of the patients was 75.9 years old and ranged from 65 to 92 years old when the maintenance therapy was commenced (O’Connor, et al., 2010). The study examined records of admissions in the period prior to the commencement of the maintenance therapy and then for the same amount of time during which the patient was receiving maintenance ECT (O’Connor, et al., 2010). Although O’Connor, et al’s., (2010) results carried quite a large standard deviation – meaning there was significant variation between cases – it did demonstrate a major improvement overall. Over a two year period, admissions for each patient went down from an average of 1.9 to 0.9 and admission days were reduced from 91.9 to 19.9 days per patient (O’Connor, et al., 2010). For this cohort of patients, the study documents significant positive effects of ECT.

ECT is now administered in a controlled manner in a procedure room with the necessary resuscitation equipment and safeguards in place that would be expected to protect any patient undergoing any sort of medical procedure requiring anaesthesia (Kramer, 1999). Modern administration techniques, short acting anaesthesia, muscle relaxants to eliminate major muscle spasm, pre-oxygenation of patients and anxiolytic drugs have minimized physical trauma of ECT (Kramer, 1999). Today, psychiatric care focuses on the patient and interventions have been developed to facilitate the administration of ECT including: screening for risk factors, patient and family education, monitoring of

vital signs during administration, and supervised aesthetic recovery period (Gomez, 2004). Along with the desire to be therapeutic, patient care, physical wellbeing, comfort and monitoring are of paramount importance in modern ECT administration (Gomez, 2004).

A powerful way to dispel the belief that ECT is not an appropriate treatment is to listen to consumers. Curtis Hartmann, a 47 year old American lawyer, says of ECT, “[it is] the only thing that has ever let me feel 100%... Depression is like being a corpse with a pulse. I tried everything else. I had a loving family, thousands of hours of good psychotherapy, and none of it ever helped” (Cloud, 2001). Cloud (2001) also went on to report that Hartmann had previously attempted suicide and Hartmann had said that without ECT he probably would have tried to again. Another consumer, Lisa Morrison, herself a mental health nurse positively describes her experience with ECT (Morrison, 2009). Morrison (2009) says she had “all but given up hope” after two different antidepressants had failed to provide her with the relief required to enable her to function as wife and mother. She says that the ECT provided her with rapid and long lasting freedom from depression and that the minimal side effects she experienced were preferable to those she had experienced on antidepressants (Morrison, 2009). Morrison (2009) says she has “never regretted having ECT.” In both of these accounts, the consumers have found ECT to provide superior outcomes for them over any other treatments.

ECT does have side effects. However, the monitoring and care undertaken during ECT administration has virtually eliminated severe negative outcomes seen mid last century such as broken teeth, broken bones, cerebral strokes or myocardial infarction (Gomez, 2004). Headaches are a common side effect and these are generally very responsive to paracetamol (Gomez, 2004). The main concern and most common complaint in terms of adverse reaction to ECT is memory loss (Gomez, 2004). Memory loss has been shown to be both retrograde and anterograde, usually only lasting approximately two weeks, but a few patients suffer these effects for months or even years [1]. Many consumers regard the potential memory issues as relatively minor when they are contrasted with the side effects of antipsychotic and antidepressant drugs (Gomez, 2004). Such drugs may lead to dramatically altered sleep patterns, sexual dysfunction, cardiac implications and weight gain (Gomez, 2004). There are claims that the administration of ECT causes brain damage, however this has not been substantiated

in autopsy of patients that have undergone modern ECT administration and died some time later (Gomez, 2004). Further a study of serum markers of brain-cell damage showed that these markers remained normal during the course of, and after ECT treatment in living patients (Giltay, Kho, & Blansjaar, 2008).

There are very few absolute contraindications for the administration of ECT. Many patients suffer physical comorbidities and these require evaluation by experts prior to the administration of ECT and sometimes management by a specialist throughout the treatment is warranted (Taylor, 2007). For example, ECT is considered safe during pregnancy but an obstetric consultant should review the patient and determine the best positioning of the patient to maintain foetal blood flow and to establish foetal monitoring if it is deemed appropriate (Taylor, 2007). Similarly with appropriate specialist care, ECT can be administered to patients with cerebral issues and cardiac patients, even to patients fitted with a pacemaker (Taylor, 2007). Some drugs, such as anti-epileptics and benzodiazepines increase the seizure threshold, increasing the difficulty of inducing the therapeutic seizure (Taylor, 2007). Appropriate titration of these types of drugs during the treatment period enables ECT to be delivered safely to this group of patients (Taylor, 2007). However, ECT is not recommended for children due to the systemic nature of their mental health presentations and their undeveloped neurophysiology. Hence, in most states of Australia ECT in children and younger adolescents is rightly prohibited in Law. ECT in adolescents should also be given wide berth and considered only by specialist child and adolescent psychiatrists.

Generally post-traumatic stress disorder (PTSD) is not recognized as a condition that indicates ECT (The Royal Australian and New Zealand College of Psychiatrists, 1999). However, PTSD is often diagnosed with other comorbidities including depression, substance abuse and other anxiety disorders (Creamer, Wade, Fletcher, & Forbes, 2011). These coexistent conditions need to be considered when determining an appropriate treatment regime for a patient (Creamer, et al., 2011). Major depressive disorder and schizophrenia are known to respond well to ECT, and both of these conditions often have traumatic underpinnings (Lindley, Carlson, & Sheikh, 2000; Margoob, Ali, & Andrade, 2010). The guidelines produced by The Royal Australian and New Zealand College of Psychiatrists do not list comorbid mental health conditions as contraindications for the use of

(The Royal Australian and New Zealand College of Psychiatrists, 1999). An individual with a depressive condition, comorbid to PTSD, which is clinically deemed to be likely to respond to ECT should not have ECT withheld from consideration as a possible treatment (Kalapatapu, 2011). The presenting symptoms should be the major influence on the selection of the most appropriate treatment (Kalapatapu, 2011).

A study that particularly focussed on PTSD and the use of ECT conducted in 2005 did find that this mode of treatment elicited improvements in the condition (Margoob, et al., 2010). The study used a group of 20 consenting adults, whose PTSD had been refractory to quite exhaustive attempts to treat using other means, including pharmacology and cognitive behaviour therapy (Margoob, et al., 2010). Improvement in the PTSD was measured using the Clinician-Administered Posttraumatic Stress Disorder Scale (CAPS) (Margoob, et al., 2010). 17 patients underwent treatment and their mean improvement in the CAPS scale 40% and their depression rating also improved by an average of 57% (Margoob, et al., 2010). The gains were maintained when reassessed at six month follow up (Margoob, et al., 2010). Although this is a small sample, and the study documented quite large confidence intervals for the improvement in CAPS, it is never the less indicative that some benefit could have been attributed to the ECT treatment. A further retrospective study that reviewed patients records for those with both PTSD and depression support the assertion that ECT may have been beneficial to that cohort (Watts, 2007).

Although ECT is not a classically indicated treatment for PTSD evidence suggests that there may be benefits in its application and, as such, warrants further research. Moreover, PTSD is not a contraindication to ECT treatment if a patient is suffering from conditions that are likely to respond positively to ECT. In many case ECT remains a valid treatment consideration, particularly if the patient is suffering from deep depressive symptoms. Furthermore the effectiveness of electroconvulsive therapy in (i) removing psychotic symptoms, (ii) alleviating suicidal ideation, and (iii) relieving vegetative states, can prevent the traumatic sequelae of a medication-resistant severe mental illness.

ECT is not the solution to all patients suffering from depression, mania or schizophrenia – regardless of the role of psychological trauma in the development of their illness. Just as treatment with a variety of drugs or other therapies is not the

solution for all patients with these conditions. Treatment choice must be approached as a careful balance of risk versus gain, considering consumer and family wishes, past experiences and expected outcomes to determine the most appropriate mode of treatment on an individual basis. Despite its early history and the popular depiction of ECT being a barbaric activity carried out in horrific and spine-chilling surroundings, today it is delivered safely in a caring and patient focused environment. Many studies have shown that ECT can be very effective against depression, mania and schizophrenia and the success is borne by the accounts of consumers that have successfully undergone the treatment. There are always risks with any medical intervention including ECT. However, the risks should not rule ECT out of consideration but become part of the evaluation in the treatment equation. ECT rightfully has a place in the psychiatrist's arsenal as a potential weapon to combat some of the severe and unrelenting mental illnesses.

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Paul Leonard B.Sc.
University of Melbourne



EXPLORING THE RELATIONSHIP BETWEEN PSYCHOLOGICAL TRAUMA AND DEVELOPMENT OF MAJOR DEPRESSIVE DISORDER

BY: ALEXANDRA SMYKOWSKY & KRISTEN TYTLER

Major depressive disorder [MDD] is a complex, multifaceted illness. It impacts on many spheres of life, affecting professional, emotional, social and psychological wellbeing. A diagnosis of Major Depressive Disorder (MDD) is statistically associated with a variety of interconnected factors including genetic inclination, a range of environmental antecedents such as parental neglect and substance abuse, predisposing personality schemata, and exposure to traumatic experiences. Much research has gone into understanding the many factors that influence and precipitate depressive episodes. Psychological trauma is one such factor that has been recognised to play an important role in depression.

Psychological trauma often has debilitating consequences for a person's life for years after the trauma is experienced, and early childhood adversity is strongly implicated in the development of major depression. Research has shown that exposure to trauma greatly increases one's risk of developing MDD (Rode, 2011). This article will discuss the role of psychological trauma in the development of MDD. Firstly, psychological trauma will be defined, and the complex interface between MDD and psychological trauma will be briefly discussed, in view of the limitation of research to entirely explain their relationship. Secondly, models of depression will be examined as frameworks, into which psychological trauma can be both a catalytic event and a predisposing factor. Finally, research into trauma in early life and subsequent development of depressive symptoms will be discussed, with a particular focus on the relationship between childhood sexual abuse and the development of MDD.

Psychological trauma

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR), traumatic stressors involve the direct personal experience, witnessing, or learning of an event that threatens a person's physical integrity (Criterion A1), and a response to the event that involves intense fear, helplessness, or horror; or in the case of children disorganised or agitated behaviour (Criterion A2) (American Psychiatric Association, 2000, p. 463). Such situations include acts of violence, such as war or terrorism, natural disasters, such as bushfires or floods, interpersonal violence, such as

rape or child abuse, or involvement in a motor vehicle accident (APS, 2012). The traumatic nature of an event depends on the individual's response, and so it is not necessarily in the nature of the event itself, but in the way that each individual copes with and manages it that constitutes the trauma. This illustrates the highly individualised nature of trauma, and the impossibility of extracting common pathways from what is essentially a singular experience. While trauma does not always lead to depressive symptoms however, research has shown that a major depressive episode is often preceded by a severe life event (Monroe, Slavich, Torres, & Gotlib, 2007).

Understanding the exact nature of a given factor in the development of MDD is challenging, not least because major works of research are emerging from various fields of clinical psychology, sociology, psychiatry, and public health and epidemiology, each field with its own frameworks of understanding (Hammen, 2005). Many models are used to explain factors contributing to MDD, and it is through the prisms of these models that the role of psychological trauma will be discussed.

Models of depression

The biopsychosocial model proposes that health and illness are dependent on biological, psychological and social factors, all of which are interdependent factors (Nemade, Reiss, & Dombeck, 2012a). As such, the mind and body are not independent of each other: what affects the body can affect the mind, and the reverse is also true (Nemade et al., 2012a). Through this model, psychological trauma can be considered as both causal and contributory in nature.

The diathesis-stress model, by comparison, focuses on the relationship between potential causes of depression and one's vulnerability or propensity to react to those causes (Nemade et al., 2012b). It purports that individuals have different degrees of vulnerability to developing depression, which are called diatheses (Nemade et al., 2012b). A diathesis alone is not enough to trigger a depressive episode, but rather a stressor must interact with a person's diathesis to prompt depression onset (Nemade et al., 2012b). Within this model, psychological trauma can be considered a stressor

that triggers depression onset, such as the death of a loved one or near-death incident, as well as a diathesis, such as repeated exposure to traumas in early life, which can render an individual with an increased vulnerability or predisposition to MDD.

Other models, such as the kindling/sensitisation model, have discussed the role that psychological traumas play in lowering an individual's stress threshold, such that in later life, relatively small stressors can act as 'kindling' and precipitate depression onset, and even repeat episodes of depression can spontaneously occur (Hammen, 2005). The diathesis-stress model is perhaps the most useful model when discussing the relationship between psychological trauma and MDD, especially in the context of early-life traumas and later development of MDD.

Trauma in childhood

Abundant research has revealed that exposure to abuse in childhood leads to higher levels of depression in adulthood (Hammen, 2005). Zavaschi and others (2006) describe depression as one of the 'best-known' psychopathological manifestations of childhood traumatic incidents. Their study conducted in Brazil revealed a strong association between exposure to multiple traumatic events, such as community violence or physical abuse and mood disorders including both unipolar and bipolar affective disorders (Zavashi et al., 2006). Yet further research conducted by Chapman and others (2004) involved a retrospective study of adverse childhood experiences in a group of 9460 individuals, which could include emotional, physical and sexual abuse, (which would be considered psychological traumas by the aforementioned definition) and household substance abuse, and parental separation or divorce (which would not be strictly considered psychological traumas). They found a graded relationship between the number of adverse childhood experiences and both lifetime and recent depressive disorders, showing that the more exposure to stressors, the greater the prevalence of depressive disorders (Chapman et al., 2004). Their results showed that even decades after exposure to such adverse childhood experiences there was still an increased risk of developing depressive disorders (Chapman et al., 2004).

In contrast to the above findings which showed a strong link between childhood traumatic events (such as abuse) and development of depression in later life, McFarlane and Van Hooff (2009) found no such link in their longitudinal study of children

affected by the Ash Wednesday bushfires in South Australia in 1983. The children had been at school on that day, and the fires had encroached upon and threatened the grounds of every school but one. Their study compared this group with a control group of 725 children from other schools in a neighbouring region that had not been directly affected by the fires. Interestingly, their findings revealed that although the affected group of children had rated as more symptomatic of mental health disorders immediately following the fires (as reported by their parents), 20 years on they rated with a similar level of anxiety and depressive disorders to the control group as well as to the Australian community (McFarlane & Van Hooff, 2009). While a third of the participants in the group affected by the Ash Wednesday Fires selected 'natural disaster' as the worst even of their life, the remainder selected another traumatic event which had occurred at an older age, such as a motor vehicle accident (McFarlane & Van Hooff, 2009). Their research did however also find a relationship between multiple traumatic events and higher levels of depression or anxiety disorders (McFarlane & Van Hooff, 2009).

This raises questions not just about the proximal and distal nature of a traumatic event, but also regarding trauma content, and level of exposure. The above-mentioned research indicates that exposure to multiple traumatic events leads to a higher risk for or incidence of depression. Still, the above findings simply highlight the complex relationship between psychological trauma and depression. Whilst inferences can be drawn about one variable (such as level of exposure), others are still confounding (such as trauma content). This complex relationship is also illustrated when research on specific trauma content is examined, as in the case of research into women survivors of childhood sexual abuse (CSA) and the development of MDD.

Childhood Sexual Abuse and MDD

Psychopathological manifestations of MDD in adulthood are impossible to trace back to the trauma associated with CSA in a linear fashion. The literature largely focuses on women survivors of CSA. Various methodological question marks have been placed over research that examines psychological outcomes of CSA however. Firstly, there is wide variance between studies in what counts as sexual abuse, with some studies including only contact sexual abuse (e.g. intercourse or attempted intercourse, and unwanted touching), and others including these as

well as all unwanted sexual attention including exhibitionism that does not involve physical contact. Secondly, the age range of childhood differs, with some studies taking 16 or 18 as the cut-off year (Bulik, Prescott, & Kendler, 2001; Kendler, Gardner, & Prescott, 2002; Nelson et al., 2002), and others preferring 13 (Maerker et al., 2004). Thirdly, there are differences in how the abuse information is obtained. Most studies examine recalled or reported incidences of abuse, which is notoriously unreliable because it rests on memory of events many years hence, which are necessarily coloured by subsequent lifetime experiences (Hill, 2003; Horwitz, Widom, McLaughlin, & White, 2001; Nelson et al., 2002; Spataro et al., 2004). Fourth, it is difficult to establish the risk of CSA independently of environmental factors, such as parental neglect, and it is impossible to show that the control group and study group, if or when they are used, don't differ in unmeasured ways (Nelson et al., 2002). Fifth, genetic factors that contribute to the risk of MDD may also lead to vulnerability for CSA, and research that fails to control for the modifiers of the effect is of limited use (Maniglio, 2010). Finally, there is always difficulty with sample selection, and probability that this introduces bias, either under- or over-estimating the relationship between CSA and MDD. Multiple studies only capture CSA survivors who are unwell and treated in the public system (Spataro et al., 2004), and most studies rely on disclosure, and many survivors of abuse do not disclose CSA. In addition to these methodological questions involving CSA, the classification of MDD is equally as varied.

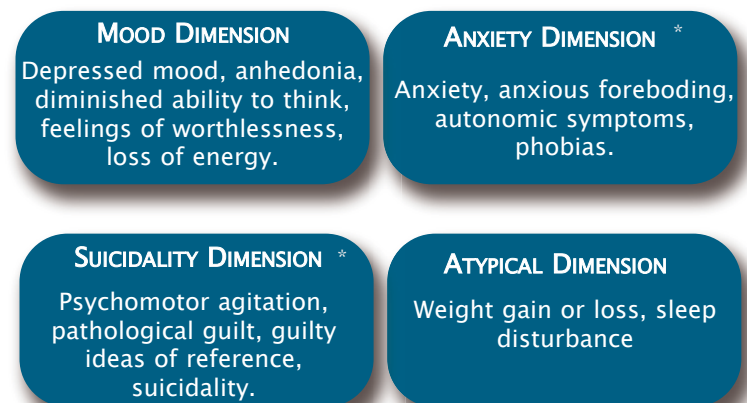
Major Depressive Disorder

There are several aetiological pathways leading to depression. Research suggests that trauma-related affective disorders tend to be more closely related to particular subtypes of depression. Indeed, according to some studies, depression is not a unitary syndrome that neatly combines an array of developmental trends. Rather, it is a fairly loose collection of symptoms gathered under an umbrella diagnosis. Moskva and colleagues (2007) describe four symptom dimensions of MDD, which largely correlate with Criterion A of the DSM-IV-TR entry on MDD. These are outlined in figure 1.

These four dimensions highlight the heterogeneity within the diagnoses of MDD, which has implications for treatment and intervention (Gladstone et al., 2004). It is argued that because MDD can be nominally broken up into these four dimensions, then it is useful to examine the

association between CSA and MDD with each of these dimensions separately in order to achieve clarity in our understanding of their relationship. Moskva and colleagues (2007), for example, found an association between CSA and both the mood and anxiety dimensions of MDD, however did not find any correlation between the suicidality and atypical dimensions of MDD. Bebbington and others (2009), however, find a strong association between suicide and CSA. We can see from the methodological difficulties outlined above that emerging scholarship examining the relationship between CSA and MDD requires careful scrutiny.

Figure 1. "Four dimensions of MDD" adapted from Moskva et al (2007)



* Not included within the DSM-IV-TR criteria, but closely associated with MDD.

Psychological consequences of CSA

CSA affects psychological, social, and neuroendocrine processes which each contribute to an individual's vulnerability for developing major depression (Heim, Shugart, Craighead, & Nemeroff, 2010; Hulme, 2011). Kendall-Tackett (2002) describes behavioural, social, cognitive and emotional pathways that are consequent of childhood maltreatment. Individuals who have experienced abuse in childhood are at higher risk of health problems because of the statistical tendency to follow aberrant pathways that are harmful to health. These range from substance abuse disorders, to sleep difficulty, to homelessness, revictimisation, and to depression. Hill (2003) argues, however, that developmental accounts of how childhood adversity contributes to the risk for major depression are not yet available because children actively cope with and manage in the face of adversity in so many different ways that pathways are impossible to chart.

In a study that examined the relationship between parental care and control, CSA and depressive symptoms in adulthood, Hill and colleagues (2000) found that CSA trebles the risk of affective

symptoms independently of parenting style (OR 3.12, 95% CI 1.8–5.41). In their study matching cases of CSA from the Victorian Institute of Forensic Medicine with mental illness on the Victorian Psychiatric Case Register, Spataro and colleagues (2004) found that CSA almost doubles the risk of developing a major affective disorder (OR 1.8, 95% CI 1.1–3.0, $P < 0.05$). From these figures, we can see that there is a significant relationship between CSA and the subsequent development of MDD. However, the variance in the strength of the relationship points to the complexity of the association, and the diversity of factors contributing to depression and CSA.

A number of studies have examined the impact of CSA on adult outcomes by examining twins (Bulik et al., 2001; Dinwiddie et al., 2000; Kendler, Kuhn, & Prescott, 2004; Kendler et al., 2002; Kendler et al., 2000; Nelson et al., 2002). These studies are designed to control for both genetic and environmental factors in the relationship between MDD and CSA. Both Bulik and colleagues (2001) and Kendler and others (2004) found that MDD was significantly associated with CSA, while Dinwiddie and colleagues (2000) did not find a statistically significant association between CSA and MDD in their twin studies. These differing results act as a reminder to be cautious when interpreting studies because of the methodological issues with study design.

Specific characteristics of childhood sexual abuse increase the risk of subsequent psychopathological outcomes in adulthood. Bulik, Prescott, and Kendler (2001) found that attempted or completed intercourse increased the risk of psychopathological sequelae, as did abuse by a relation, use of force, and a negative response by a person to whom the abuse was disclosed. These authors, however, did not find unique predictive relationships between features of CSA and psychopathological sequelae. Maercker and others (2004) find from a sample of young women living in Dresden a prevalence rate of MDD of 40.0% following ‘rape’ in childhood (up to age 12 years), compared to an MDD probability of 15.2% following childhood molestation. By contrast, Hill and colleagues (2000) found no evidence to suggest that the risk of developing major depression was related to the severity or frequency of CSA.

Maercker and colleagues (2004) argue that there is an age-differential risk in trauma related disorders, with younger age of traumatisation (below 12 years) being more closely associated with MDD in adult women when compared with traumatisation

in adolescence. According to these authors, “both the estimated relative risk (3.6; 95% CI 2.09–6.22) and the conditional probability (23.3% v. 6.5%; $\chi^2(1)=12.07$, $P=0.001$) indicated a higher risk for developing major depression when trauma occurred in childhood” (p. 485).

While it is clear from this research that CSA has a significant impact on individuals and the subsequent development of psychological syndromes, the relationship is complicated by a number of issues, including study design and questions of definition and sampling, as well as individual characteristics and coping strategies and environments that predispose them to, or protect them from, adverse psychological outcomes. Individual reactions to psychological trauma are unique making it impossible to typify psychopathological pathways.

Conclusion

The research discussed above reveal just how complex and multifaceted the relationship between psychological trauma and MDD really is, and it is for this reason that treatment must therefore be individualised to each patient. In terms of statistical trajectory of illness, some commonalities can however be drawn from existing research. Trauma histories lead to higher rates of resistance to pharmacotherapy, and psychotherapy is a necessary form of treatment for people with a diagnosis of depression combined with a history of trauma (Hovens et al., 2009). The research on CSA and MDD reveal a number of mediating and protective factors, indicating that early intervention may be effective in preventing the subsequent development of adverse psychological outcomes. By developing individual coping strategies and building resilience, early intervention may mitigate the psychopathological consequences of CSA (Cukor & McGinn, 2006; Philippe et al., 2011; Valerie, Janice, & Jennifer, 2000). Other authors have stressed the importance of remembering the individual within the multiple models, frameworks and hypotheses (Parker, 2010). Parker (2010) asserts that the management of depressive disorders and the role of life event stressors should avoid any single explanatory model, and should rather adopt a ‘mix and match’ approach which asks “Why this person is depressed at this particular time?”, considering their developmental history, distal and proximal stressors, their attributional style, and their depression sub-type, and then puts together an operative hypothesis for proceeding.

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Alexandra Smykowsky, B.A.
Kristen Tytler,
University of Melbourne



THE RELATIONSHIP BETWEEN SCHIZOPHRENIA AND PSYCHOLOGICAL TRAUMA - A CRITICAL REVIEW OF THE RECENT LITERATURE

BY: JEREMY POON

Psychological distress ranging from helplessness to intense fear and horror from traumatic events has been linked to a shift in the mental wellbeing of individuals. Similarly, persons who have experienced psychological trauma are more likely to exhibit dissociative behaviour than those who have not (Gershuny & Thayer, 1999; Harvey, 1996; Schäfer et al., 2011). In recent years, research in the development of schizophrenia from psychological trauma, especially childhood trauma has gained widespread popularity in the academic community (Berenbaum, Thompson, Milanak, Boden, & Bredemeier, 2008; Morgan & Fisher, 2007; Read, Os, Morrison, & Ross, 2005; Schürhoff et al., 2009).

Given the growing body of literature in the relationship between schizophrenia and psychological trauma, this paper aims to provide a brief review highlighting the key aspects of this research.

Psychological Trauma & Psychosis

Many people experience some sort of psychological trauma in life (Breslau, 2009; Norris & Slone, 2007). How one copes with this trauma will vary depending on an individual's subjective experience. Furthermore, the likelihood of developing dissociative and schizophrenic symptoms from trauma will depend on an individual's age, sex and race (Breslau, 2009; Roberts, Gilman, Breslau, Breslau, & Koenen, 2011). Trauma whether it is through experienced or witnessed events can occur throughout a person's lifetime. Natural disasters, physical violence, death, sexual abuse, psychological abuse, transportation and road accidents are all examples of events that may result in trauma. Those individuals with dissociative phenomena and psychotic symptoms are more likely to suffer greater trauma related distress when exposed than individuals who are mentally well (Gershuny & Thayer, 1999; Hammersley et al., 2003). Similarly, those vulnerable whether it is through biological or genetic predisposition may develop psychotic and schizophrenic symptoms more readily than less vulnerable groups (Lipina et al., 2011). Given these facts, it would be natural to theorise some sort of linkage or relationship between childhood trauma and the development of

psychoses and schizophrenia, given also the high prevalence of victims of child abuse among individuals with schizophrenia (Sar et al., 2010; Shannon et al., 2011). As such much interest and research has centred on childhood trauma, and its role in the development of schizophrenia (Morgan & Fisher, 2007; Read et al., 2005; Sar et al., 2010).

Childhood Trauma in the Development of Schizophrenia

Childhood trauma is described in literature as a range of adverse experiences including emotional abuse and neglect (Morgan & Fisher, 2007). In 2010, Australia had approximately 46,200 children who were maltreated. Emotional abuse accounted for the majority of the cases at 37%. This was followed by neglect 28.7%, physical abuse 21.6%, and sexual abuse 12.7% (Lamont, Australian Institute of Family Studies, & National Child Protection Clearing House, 2011). Similarly, in the United Kingdom the historical prevalence of childhood physical abuse is around 24% with sexual abuse in the 11% range (May-Chahal & Cawson, 2005; Radford et al., 2011). The figures for the United States tend to be even greater (Sedlak et al., 2010). Given the correlation between childhood abuse and psychoses, these numbers provide a poignant reminder of how many preventable cases of schizophrenia and mental disorders there may be in the community.

In recent years, there has been much discussion and debate on the review article by Read et al (2005) on the relationship between childhood trauma and schizophrenia. This is based on his earlier work in (2003) where he and Ross examined psychological trauma and psychoses, and the reasons why psychological therapies should be offered. His review article (2005) reports that childhood abuse and neglect is a causal factor for psychoses and schizophrenia, in particular auditory hallucinations. Furthermore this causation follows a dose effect relationship. The review also states there are several psychological and biological mechanisms involved in childhood trauma which leads to psychosis and schizophrenia. Altering in brain function from adverse events is also acknowledged. The main limitations of the review include the limited number of well-designed

studies with large populations. Another aspect of the review that comes under criticism is that 31 out of the 51 studies examined are diagnostically heterogeneous samples, where the numbers of individuals with psychotic disorders are not clear (Morgan & Fisher, 2007).

The prevalence figures calculated in the Read et al (2005) review combines data from various studies. This assumes that the samples from various sources are comparable, such that similar measures, methodology and timeframes were used. The selected studies in the review also employed different definitions and as such used different measures. In combining data, results from individuals who suffered long term chronic trauma with greater illness severity and chronicity were mixed in with the general population set. Even though this was limited to 2 studies, it is widely acknowledged that long term trauma is linked to many of the different types of mental disorders classified in DSM-IV-TR (Morgan & Fisher, 2007). Furthermore, long term trauma may result in heightened sensitivity to stress, which is a principal feature of schizophrenia (Shack, Averill, Kopecky, Krajewski, & Gummattira, 2004; Walker & Diforio, 1997).

Debate has also centred on which of the environmental factors or negative life events contribute most in the development of psychoses and schizophrenia. These include childhood neglect, physical abuse, sexual abuse and emotional abuse. In addition, research has centred on the age an individual is exposed to trauma, and the time of onset of psychotic symptoms. Studies have shown that those below the age of 16 who are exposed to trauma will have a higher likelihood of presenting with psychotic symptoms within 3 years of exposure. Whilst dose effect responses were observed, no formal testing of the abuse and trauma versus symptoms relationship were undertaken (Janssen et al., 2004). In a separate large population study which also included adult trauma, it was found that any lifetime exposure to a list of 9 traumatic events would result in the presentation of 3 or more psychotic symptoms within a 42 month period (Spauwen, Krabbendam, Lieb, Wittchen, & Van Os, 2006). Natural disasters were found to be the most severe trauma in eliciting psychotic symptoms, followed closely by physical threats. Past history of sexual abuse is also associated with the development of 3 or more psychotic symptoms (Bebbington et al., 2004; Janssen et al., 2004). Whilst the study by Spauwen et al (2006) tends to agree with this, the impact of sexual abuse in their results are of less significance

than with their peers.

Sexual abuse and its role in the development of schizophrenia was examined in a study by Spataro et al (2004) using a control sample of hospital admission rates ($n > 3,000,000$) which were matched to those who were sexually abused before the age of 16. No association was found which linked the development of schizophrenia to the trauma of childhood sexual abuse. Two reasons were suggested for this result, the first being that many sexual abuse cases remain unreported, thereby not registering in the sample population of the study. In addition, those 1600 that were in the control group, would have had some form of protective factors provided by governmental agencies, which would negate the development of psychoses (Morgan & Fisher, 2007; Spataro et al., 2004). Another large population study examining childhood physical and sexual abuse reported that those abused during childhood were strongly associated with developing hallucinations later in life (Whitfield, Dube, Felitti, & Anda, 2005). This result is consistent with those reviewed by Read et al (2005).

The studies and reviews on this topic in literature have a common theme, and that is there is a strong link between childhood and adult trauma in the development of psychoses and mental disorders such as schizophrenia.

Mechanism from Trauma to Schizophrenia

How does psychological trauma result in the development of psychoses and schizophrenia? The current accepted theory is that social environmental factors can affect our biological development, such that adverse events such as psychological trauma and our social experience across life can impact on the very chemical neurotransmitters that govern how a person feels and reacts to stimuli (Morgan & Fisher, 2007).

Dopamine is involved in a multitude of roles, from its functions in the autonomic nervous system, to learning and cognition (Poon & van den Buuse, 1998). Recent studies suggest that extended exposure to trauma may have a direct effect on the functions of dopamine, such that there is dopamine hyperactivity and elevated levels resulting in sensitisation (Tidey & Miczek, 1996). Similarly, prolonged exposure to trauma in childhood has been associated with long term effects on the hypothalamic-pituitary-adrenal (HPA) axis, resulting in increased risk of psychoses later in adulthood (Read et al., 2005). Moreover, studies

examining women who have been sexually abused during childhood have found there to be HPA deregulation (Heim et al., 2000). Genetic susceptibility has also been proposed as an underlying cause to the development of schizophrenia from exposure to trauma (Tienari et al., 2004).

Conclusion

Psychological trauma is the experience an individual is confronted with when they witness or are involved in an adverse event (Read et al., 2005). It is clear that there is an association between psychological trauma and the development of schizophrenia. Whilst research has largely centred on childhood trauma, exposure to trauma in children and adults both follow a dose response relationship, such that long term exposure results in more pronounced psychoses (Morgan & Fisher, 2007).

Exposure to natural disasters has been found to be a powerful link in the development of psychoses. Sexual and physical traumas are also strongly correlated (Read et al., 2005; Spauwen et al., 2006). Environmental factors affect biological development, and as such there are changes to the dopaminergic system after exposure to trauma (Tidey & Miczek, 1996). These changes and genotype susceptibility are the mechanisms currently proposed by which psychological trauma leads to psychoses and schizophrenia (Tienari et al., 2004).

Given the extent of psychological childhood trauma in Australia and other developed nations, it is clear that the development of schizophrenia can be reduced if childhood abuse is also reduced.

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Jeremy Poon

BSc(Hons) BCom MBA MCom

University of Melbourne



THE RELATIONSHIP BETWEEN BORDERLINE PERSONALITY DISORDER AND PSYCHOLOGICAL TRAUMA – A BRIEF REVIEW OF THE RECENT LITERATURE

BY: RACHEL MORGAN

Introduction

Borderline Personality Disorder (BPD) is a fascinatingly complex disorder incorporating biological, genetic and environmental factors in its aetiology. It is a very common mental health condition and is the most frequent presentation to mental health services. Epidemiological surveys of the general population of USA found prevalence rates between 0.5 to 5.9% with no difference in male or female prevalence (Grant et al., 2008; Leichsenring, Leibing, Kruse, New, & Leweke, 2011). In clinical settings about 75% of the clients are women (Gunderson, 2011). Clients present with recurrent suicidal threats or acts, self-harm, fears of abandonment, emotional volatility, hypersensitivity to rejection, and recurrent crises (Gunderson, 2011). Sufferers have a high risk of suicide, comorbid mental disorders, extensive use of treatment and high costs to society (Leichsenring, et al., 2011). BPD diagnosis is usually made in early adulthood, however symptoms may be evident from early adolescence. The aetiology of BPD is complex incorporating biological (prefrontal and temporolimbic dysfunction, amygdala size), genetic/inheritable, and environmental factors (e.g. childhood traumatic events) (Gunderson, 2011; Leichsenring, et al., 2011; Swift, 2009).

The aim of this review is to examine the role of childhood or early adolescent psychological trauma in the development of BPD. The objectives of this review are to identify the key areas of psychological trauma implicated in BPD, critically evaluate current literature in this area, and identify gaps in the research literature. My contention is that the childhood emotional abuse (CEA) and childhood emotional neglect (CEN) are the trauma most implicated in the development of BPD, however other non-traumatic factors such as genetic and biological factors also affect BPD development.

Role of Childhood Trauma in Development of BPD

Key areas of trauma implicated in the aetiology of BPD in several countries (Germany, U.K., Australia, Japan, USA, and Canada) were identified in eleven studies that used robust methodology (Carr &

Francis, 2009; Collishaw et al., 2007; Elzy, 2011; Gunderson et al., 2011; Katerndahl, Burge, & Kellogg, 2005; Laporte, Paris, Guttman, & Russell, 2011; Machizawa-Summers, 2007; Paris, Zweigfrank, & Guzder, 1994; Widom, Czaja, & Paris, 2009; Wingenfeld et al., 2011; Zanarini et al., 2002). Each of these studies used validated self-report questionnaires for participants, five also used structured or semi-structured interviews (Collishaw, et al., 2007; Katerndahl, et al., 2005; Laporte, et al., 2011; Paris, et al., 1994; Wingenfeld, et al., 2011) and two papers included longitudinal data (Collishaw, et al., 2007; Widom, et al., 2009). The traumata investigated were childhood emotional abuse (CEA), childhood emotional neglect (CEN), childhood sexual abuse (CSA), childhood physical abuse (PSA), and childhood physical neglect (CPN).

Childhood abuse (CA) has been shown to be a significant predictor of BPD and BPD traits, with increased severity and duration of abuse leading to worse outcomes (Collishaw, et al., 2007; Elzy, 2011; Machizawa-Summers, 2007; Paris, et al., 1994; Widom, et al., 2009; Wingenfeld, et al., 2011). CSA is a significant predictor of all aspects of measured psychopathology (Wingenfeld, et al., 2011). Research demonstrates that people diagnosed with BPD or with BPD traits report more severe abuse during childhood and abuse over a longer duration than people diagnosed with other mental health disorders or who have no mental health disorder (Carr & Francis, 2009; Elzy, 2011; Laporte, et al., 2011; Machizawa-Summers, 2007; Paris, et al., 1994; Widom, et al., 2009).

Several studies used regression analysis to control for many forms of CA and family functioning. Results of an Australian study showed that CEA was the only uniquely significant predictor of BPD symptoms when controlling for all other CA and family functioning factors (Carr & Francis, 2009). A USA longitudinal study demonstrated that emotionally and physically neglected men and women had significantly more BPD symptoms than the control group (Widom, et al., 2009). In Japan, EA, EN and paternal overprotection were significant predictors of BPD in Japanese women (Machizawa-Summers, 2007). Interestingly, the earliest study presented here (Paris, et al., 1994) found the development of BPD in men had two significant

variables – CSA and separation or loss before 16 years. However the authors also qualify that there is no direct correspondence between CSA and BPD development as half the BPD sample had no history of CSA and one quarter of non-BPD sample did have a history of CSA. They did not examine CEA or CEN.

Significant predictors of the development of BPD were found in several other studies that had not assessed CEA or CEN or had not provided regression analysis of their results. These predictors included: the use of threats or violence, counselling for CSA, and mother to father violence (Katerndahl, et al., 2005); CSA and low level of social support (parent, friend, other close adult) or invalidating responses from social support (Elzy, 2011); a combination of CSA and childhood neglect contributed to the overall severity of BPD psychopathology (Zanarini, et al., 2002). Some of these factors may be re-interpreted as CEA or CEN, for example, use of threats (instilling fear), seeing violence within family, counselling for, low level of social support or inadequate response from social support (perceived as CEN).

CSA has been widely researched as a precursor to the development of BPD, however, the results of several of these studies do not support this theory. It has been shown, though, that severe CSA (by familial members, perpetrated over a long duration, or with several perpetrators) can predict BPD. This can, however, be related to CEA and CEN as repeated CSA by one or more perpetrators does not occur in isolation as a physical act. It is often accompanied by feelings of fear and shame by the CSA survivor and by inappropriate or cruel comments (and possibly threats and violence) from the perpetrator. These constitute CEA and, if the CSA is known or suspected by others, then CEN is also evident. Further investigation into the relationship between CSA and CEA would be valuable.

Other Factors in the Development of BPD

Many survivors of CA do not subsequently develop any psychopathology and, conversely, some non-abused children develop BPD. A study of 56 pairs of sisters found that the sisters reported very similar forms of mistreatment however only one sibling from most pairs developed BPD indicating psychological trauma is only one factor in the development of BPD (Laporte, et al., 2011). Studies involving control groups have shown that 44.5% and 24.4% respectively of CA survivors were not diagnosed with mental health disorders (Collishaw, et al., 2007; Katerndahl, et al., 2005).

Using multilevel analysis, the authors of one report found that the personality traits of BPD clients and their sisters were markedly different (Laporte, et al., 2011). Other research found a strong familial link to BPD and its four sectors (affective, interpersonal, behavioural and cognitive) (Gunderson, et al., 2011). These studies indicate that familial personality traits play an important role in resilience and that BPD results from a complex combination of factors – hereditary predisposition and stressors. Further Investigation

This review evaluated only a sample of the recent literature available on the role of childhood psychological trauma in the development of BPD, however, two areas appear to be neglected in the research. The first is the group of people diagnosed with BPD or who have BPD traits that do not report CA. This is important research to find out more about the aetiology of BPD. The other area is men diagnosed with BPD or BPD traits. An epidemiological survey of the general population of USA found no difference in the prevalence of BPD between men and women in the community (Grant, et al., 2008), however most research appears to have focused on women with BPD. Five of the papers reviewed interviewed women only (Elzy, 2011; Gunderson, et al., 2011; Katerndahl, et al., 2005; Laporte, et al., 2011; Machizawa-Summers, 2007) and only one interviewed men only (Paris, et al., 1994). In two of the other papers, the majority of the subjects were women (Carr & Francis, 2009; Zanarini, et al., 2002). Although most of presentations to mental health services are women, it would be valuable to understand men's perspectives and the aetiology of their disorder.

Conclusion

Borderline Personality Disorder is a complex disorder where several factors combine to produce emotionally volatile individuals who are highly sensitive to rejection and have great difficulty forming stable relationships. They present frequently to mental health services following suicide or self-harm attempts, and have a high rate of suicide completion. The majority of clients presenting to mental health services are women.

This review investigated the role of childhood psychological trauma in the development of BPD. Critical evaluation of the literature found that CEA and CEN were found to be more damaging to the emerging psyche than physical or sexual abuse or physical neglect, but that childhood psychological trauma did not always lead to BPD development. Other factors, genetic and biological, are involved

in the development of BPD, and inherent personality traits in particular play an important role. Gaps in the research literature were identified to be the people diagnosed with BPD who report no CA and men diagnosed with BPD.

Continuing research into the aetiology of BPD, particularly the environmental antecedents, such as CA, is vital because a difference to the long term mental health prognosis of individuals can be made if the environment they grow up in is improved. Their genetics and biology may not change, however, their environment or how they perceive their environment and themselves can be altered.

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Rachel Morgan BSc
University of Melbourne



ASTSS RESEARCH AWARD WINNERS GAIN INTERNATIONAL ATTENTION

Every year the ASTSS rewards academic excellence with three prizes designed to acknowledge and encourage new researchers in the field of traumatic stress. The winners of the 2010 and 2011 awards have taken their work around the world, publishing in local and international journals, and presenting their work at conferences in Australia, Canada, Hong Kong and the USA.

Dr Alexandra de Young won first prize in the 2011 awards with her study of PTSD diagnoses in young children. Her work has been published in the *Journal of Clinical Child and Adolescent Psychology*, and Alexandra presented her research at the International Society for Traumatic Stress Studies annual meeting in Atlanta. She reports that the ASTSS prize money enabled her to attend another conference in Baltimore where she presented related work. In the coming years, Alexandra plans to build on her research with international collaborators and pursue a new approach to PTSD prevention in injured preschool children.

The abstract of Alexandra's first place 2011 ASTSS award winning study is below:

'Diagnosis of Posttraumatic Stress Disorder in Preschool Children'

This study investigated the existing posttraumatic stress disorder (PTSD) algorithms to determine the most developmentally sensitive and valid approach for diagnosing PTSD in preschoolers. Participants were 130 parents of unintentionally burned children (1-6 years). Diagnostic interviews were conducted with parents to assess for PTSD in their child at 1 and 6 months post injury and the Child Behavior Checklist for 1.5-5 was also completed. The proposed PTSD in preschool children algorithm for the Diagnostic and Statistical Manual of Mental Disorders (5th ed.; PTSD-DSM-V-P) provided the most developmentally sensitive and valid measure of PTSD. The rate of PTSD-DSM-V-P diagnosis was 25% at 1 month and 10% at 6 months. The predictive utility of Criterion A was not demonstrated. These findings provide support for the inclusion of the proposed PTSD in preschool children algorithm in the DSM-V.

Bridget Callaghan received second prize in the 2011 ASTSS awards. Her study of anxiety disorder formation in infant rodents has led to further research into the biochemical process of stressful memory formation. Bridget's award money helped her attend international conferences, where she

presented her work to the leading researchers in the field.

The abstract of Bridget's second place 2011 ASTSS award winning study is below:

'Maternal separation results in early emergence of adult-like fear and extinction learning in infant rats'

Recent studies in rats have shown that extinction occurring early in life is resistant to relapse and may represent the erasure of fear memories. In the present study we examined the effects of early life stress on extinction in the developing rat, which could have important implications for the treatment of anxiety disorders in those who have experienced early life stress. In the present study, we used maternal separation on postnatal days (P) 2-14 as an early life stressor. On P17, maternally separated and standard-reared animals were trained to fear a noise associated with a foot shock. The fear of this noise was then extinguished (through repeated non-reinforced noise presentations) on P18. Animals were tested for contextually mediated, stress-mediated, and GABA-mediated fear relapse the day after extinction. We found that young animals exposed to maternal-separation were more likely to exhibit context- and stress-mediated relapse after extinction than standard-reared animals (Experiments 1 and 2). Further, unlike standard-reared animals, maternally separated rats exhibited a return of fear when the inhibitory neurotransmitter GABA was blocked at test (Experiment 3). These effects were not the result of maternal separation increasing rats' sensitivity to foot shock (Experiment 5) and may in part be related to superior long-term memory for contexts in P17 maternally separated rats (Experiment 4). Taken together, these results suggest that early life adversity may prepare young animals to respond more cautiously toward fear signals in their environment.

Dr Charini Gunaratne studied the trauma outcomes of a group of 2004 South Asian tsunami survivors. Her work secured equal third place in the 2011 ASTSS awards and a presenter's place at the International Conference on Global Health and Public Education held in Hong Kong. Charini's study constituted her PhD thesis and is currently under consideration for inclusion in the *Journal of Trauma and Dissociation*.

The abstract of Charini's equal third place 2011 ASTSS award winning study is below:



'Trauma related symptoms in Sri Lankan adult survivors after the tsunami: Pretraumatic and Peritraumatic factors'

Limited research has been conducted on factors associated with psychological distress following natural disasters among non-Western populations. The 2004 Tsunami impacted on an estimated 1.7 million people across South Asia. Considerable variation in traumatic stress outcomes has been reported. Using a 25-item questionnaire, the pre-traumatic and peritraumatic conditions associated with traumatic stress symptoms were examined one month post-tsunami in a sample of 305 adult Sri Lankan survivors (72% female, aged 18 to 83, M=39.9 yrs, SD=15.3). The outcome measure (summed traumatic symptom scores) was dichotomised into no/low (0-2) and high (≥ 3) symptom categories. Binary logistic regression tested for associations between pretraumatic and peritraumatic conditions and symptom category, with the latter analysis adjusted for pretraumatic variables. Pretraumatic conditions such as female gender, being employed, prior health issues, previous substance use and peritraumatic conditions such as loss of family, witnessing the tsunami, suffering an injury, were associated with increased odds of being in the high symptom category. These findings are discussed in terms of comparison to studies of Western populations exposed to disasters, suggesting that in the Sri Lankan context, adults are affected more by human losses and less by material losses.

Dr Melissa Weinberg also achieved an equal third place position in the 2011 ASTSS awards with her study of trauma transmission in the families of holocaust survivors. Since winning the award, Melissa has completed her PhD and plans to present the research at the International Society for Quality of Life Studies conference in Venice, Italy. Her work is also under consideration for November's International Society for Traumatic Stress Studies conference in the USA. Melissa continues to prepare research for many trauma and wellbeing journals.

The abstract of Melissa's equal third place 2011 ASTSS award winning study is below:

'Subjective Wellbeing and the Intergenerational Transmission of Trauma in Australian Families of Holocaust Survivors'

Sixty-five years after the Holocaust, there is evidence to suggest that the psychological trauma of survivors has been passed down to their children and grandchildren, the second and third generations. This study aims to explore the inter-generational transmission of trauma in an Australian sample, under the theoretical framework

of Subjective Wellbeing (SWB) Homeostasis. A sample of 285 Australian Jews was compared to a representative Australian sample. Subsequently, the Jewish sample was split according to whether they were descendants of survivors or not, and comparisons revealed that children of survivors were found to report lower positive mood than other Jews whose parents were not in the Holocaust. Further exploration revealed that, in particular, those who had two survivor parents were at greater risk of experiencing lower positive mood. These findings provide evidence for the intergenerational transmission of trauma in an Australian sample, in the form of lowered general positive mood.

Emma Barrett was the first place winner of the 2010 ASTSS awards. Her study of violent behaviour in PTSD and SUD sufferers has led, through further research and collaboration with NDARC and researchers at NSW Justice Health, to the trialling of a new intervention for co-morbid PTSD and SUD among prisoners in NSW. Emma leads the outcomes paper for the trial and plans to publish her findings this year. She has presented her research at many conferences in Australia, the International Association of Forensic Mental Health Services conference in Canada and the Conference of the College on Problems of Drug Dependence in the USA. The ASTSS award winning article was published in the journal Addictive Behaviours.

The abstract of Emma's first place 2010 ASTSS award winning study is below:

'Hurt people who hurt people: Violence among individuals with comorbid substance use disorder and posttraumatic stress disorder'

The association between substance use disorder (SUD) and the perpetration of violence has been well documented. There is some evidence to suggest that the presence of posttraumatic stress disorder (PTSD) among substance users increases the risk for violence. There is, however, a lack of detailed investigations of factors associated with increased risk for violence among individuals with comorbid SUD and PTSD. This study aims to determine the prevalence of violence perpetration and examine factors related to the risk of violence among individuals with comorbid SUD and PTSD. Data was collected from 102 participants recruited to a randomised controlled trial of an integrated treatment for comorbid SUD and PTSD. The interview addressed demographics, perpetration of violent crime, mental health including aggression, substance use, PTSD, depression, anxiety and borderline personality disorder. Over half of the participants reported committing violence in their lifetime and 16% had committed violence in the past month. Those who had committed violence

reported higher levels trait aggression, increased use of alcohol and cannabis, decreased use of other opiates, and more severe PTSD symptoms. The independent predictors of violence were higher levels of physical aggression and more severe PTSD hyperarousal symptoms. These findings provide support for the relationship between SUD, PTSD and violence. Knowledge of the factors that predispose individuals to violent offending has

important implications for clinical and forensic practitioners.

To find out more about the ASTSS Research Award, application dates and entry requirements visit the Awards portal on the ASTSS homepage.

www.astss.org.au



STRESS POINTS ADVANCING TRAUMA RECOVERY AND RESEARCH

Stress Points is a quarterly ejournal produced by the Australasian Society for Traumatic Stress Studies (ASTSS). It aims to report and examine current developments in research, theory, clinical practice, social policy and inquiry in the field of trauma and posttraumatic mental health, with contribution and dissemination beginning with ASTSS members. Members and non-members can make contributions in the form of feature articles, reviews, interviews, research reports, meta-analyses or opinion pieces - all with the primary focus on trauma.

prevent and/or minimise the unwanted consequences of such experiences, and (3) to promote high standards and ethical practices in the trauma field.

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The themes of upcoming editions of *Stress Points* are:

Spring 2012

Released: September 2012
Trauma, Armed Forces and Emergency Services
Submission deadline: August 11

Summer 2012

Released: December 2012
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Submission deadline: November 11

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Submission deadline: February 11

All contributions must be consistent with the stated mission of ASTSS: (1) to advance knowledge about the nature and consequences of highly stressful events, (2) to foster the development of policy, programs and service initiatives which seek to



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Stress Points, Winter, 2012

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A.C.O.T.S. 2012

THE AUSTRALASIAN CONFERENCE ON TRAUMATIC STRESS

SEPTEMBER 7TH - 8TH 2012

The Australasian Society for Traumatic Stress Studies (ASTSS) and The Australian Centre for Posttraumatic Mental Health (ACPMH) together occasion the Oceania region's psychological trauma conference of the year.

Hosting a range of internationally recognised presenters, ACOTS 2012 will once again provide participants with a rich breadth and depth of knowledge and exposure to contemporary thinking in the field of psychological trauma.

The conference theme, "Trauma and Disaster: Complexity, Diversity and Recovery", draws together worldwide and national experts to explore the aetiology, treatment and prevention of trauma and disasters. Professional researchers, clinical practitioners, policy makers, service developers, secondary and tertiary educators, social welfare, consumers and other stakeholders are encouraged to attend this diverse Australasian Conference On Traumatic Stress.

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Public Health Approaches to Disaster

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Indigenous Populations and Trauma

University of Western Australia



Professor Pat Dudgeon