ISTSS

TRAUMATIC stress points

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President's Column

Marylène Cloitre, Ph.D.
President

Planning for the ISTSS Annual Meeting in Baltimore is proceeding at a good pace. This year's theme is "Social Bonds and Trauma Through the Life Span." This theme allows us to contemplate the power of social bonds in strengthening resilience when adversity strikes and in creating the power to move society and to make changes that seem difficult if not impossible at times.

The opening evening of the conference will include a plenary discussion by some of the individuals who advocated early on for recognition of the consequences of trauma, fought for the diagnosis of PTSD and with a vision of what was possible, founded ISTSS. In the aptly named plenary "We Couldn't Have Done It Without Them," Chris Courtois, PhD, Matt Friedman, MD, PhD, Sandra Bloom, MD, and Charles Figley, PhD, all luminaries in our field, will discuss the social environments that defined their early professional years and the social bonds that supported them in their efforts.

The program covers a broad and diverse range of topics, speakers and social activities. There will be keynote presentations from Judith L. Herman, MD, Steven Suomi, PhD, and filmmakers Alex Kotlowitz, and Eddie Bocanegra, producer and subject of the *The Interrupters*, an award-winning documentary on community-based action to reduce violence.

We are also looking forward to the invited featured sessions including symposia focused on the recent tsunami disaster in Japan, the 10th anniversary of the September 11th terrorist attacks and the new ISTSS Complex Trauma Treatment Guidelines.

IN THIS ISSUE:

Great thanks go to conference co-chairs Christie Jackson, PhD, and Bradley Stolbach, PhD, who along with ISTSS staff, have put together what promises to be an excellent meeting.

Of the six strategic goals established by the Board of Directors in November 2010, two have been the focus of attention in the 2011-2012 year: the global initiative and organizational excellence.

The development and implementation of these goals have involved substantial data collection via interviews with various key stakeholders (such as the leaders of our affiliate societies) as well as surveys of member attitudes and interests. Thanks to members who participated in the survey concerning the global initiative. Close to 300 members took the time to participate.

Responses from participants in both the qualitative interviews and the survey suggest that there is a strong interest and perceived value in having the society become more truly engaged in trauma prevention, intervention and policy influence at a global level.

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Discussions about feasible business models that will support this vision are underway this summer. A workgroup, including a subset of board of directors members and ex-officio board members, as well as representatives of affiliate societies will be conferring over the summer and will make proposals regarding workable models for consideration at the next board meeting in November.

In regards to organizational excellence, the board is redefining and refreshing its ideas about how best to structure workgroups so that the society can complete tasks quickly, be directed by and responsive to member needs and interests, easily engage members interested in participating in workgroups and leadership opportunities and be more innovative and responsive to opportunities in the larger financial and social environment.

We also wish to create means by which information about the activities of the society can be more effectively communicated to members in an ongoing, real-time fashion. The Board of Directors will be holding a series of telephone conferences over the summer to engage in some self-evaluation and to develop a taskforce that will complete interviews with the chairs of our society's more than 20 committees and taskforces. With this information, we will consider how to restructure workgroups and related networks to enhance communication, grow leadership and ensure progress for the society.

You will hear more about these two projects in the near future and at the annual meeting in Baltimore.

Beginning August 4 – Cast Your Votes Online for the ISTSS 2011 Election

ISTSS Nominees for President-Elect:
Jonathan I. Bisson, DM
Karestan C. Koenen, PhD * **

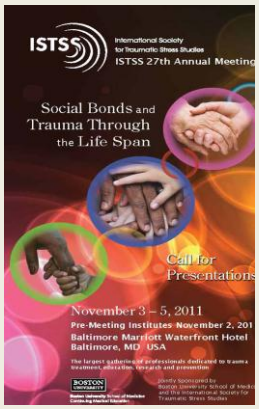
ISTSS Nominees for Board Members (electing six):
Bekh Bradley, PhD
Alain Brunet, PhD
Kathleen Chard, PhD
Grete A. Dyb, MD, PhD
Justin A. Kenardy, PhD
Dean Kilpatrick, PhD **
Karestan C. Koenen, PhD * **
Ruth A. Lanius, MD, PhD
Daniel L. Mosca, MD
Eric Vermetten, MD, PhD

* Candidates may simultaneously run for president-elect and reelection to the Board of Directors. If such candidate is elected to both positions, the election to the Board of Directors will be void and the position will be filled by the candidate receiving the next highest number of votes.
** Current board member running for reelection

Note that, with the exception of the president, individuals are typically limited to two consecutive terms on the board. This year, ISTSS members will elect six board members to serve three-year terms beginning November 2011. Members will also elect a president-elect who will assume the office of president in November 2012. You will soon be able to visit the ISTSS website to view candidate statements, photos and a list of frequently asked election questions. You will not be able to access the ballot until voting opens on August 4, 2011.

Watch for more details about electronic balloting. If you have questions about the election, contact Krista Baran at ISTSS at kbaran@istss.org.

ISTSS 27th Annual Meeting Travel Grants – Support your colleagues in developing countries today!



Each year, trauma specialists engaged in cutting-edge research and important clinical work in developing countries can't afford to attend the International Society for Traumatic Stress Studies (ISTSS) Annual Meeting.

Because ISTSS understands the critical need for the advancement and exchange of knowledge about severe stress and trauma around the world, travel grants are offered to help support meeting attendees coming from developing countries.

Your generous financial support of the Travel Grant Fund will enable ISTSS members from developing countries to attend and present their work at the meeting.

Visit the ISTSS website information, including testimonials from past grant recipients, and donate today!

Donate Now

Filmakers Steve James and Alex Kotlowitz to Screen New Film, *The Interrupters*, at ISTSS 27th Annual Meeting

The ISTSS 2011 Annual Meeting in Baltimore will feature a screening of the new movie ***The Interrupters,*** an award-winning film from **Steve James** (*Hoop Dreams*) and **Alex Kotlowitz** (*There Are No Children Here*) that tells the moving and surprising story of three "violence interrupters" in Chicago who with bravado, humility and even humor try to protect their communities from the violence they once employed.

In addition to the film screening, Alex Kotlowitz and Eddie Bocanegra, producer and subject of the acclaimed film will share their thoughts in a keynote discussion about the ways in which trauma shapes the lives of individuals caught up in urban violence, and how social connections may be key in preventing shootings. Kotlowitz will discuss his experiences over the past twenty years reporting and writing on the stubborn persistence of urban violence in America, where shootings in concentrated areas are so pervasive that gun violence forms its own culture, creating its own language, signage and rituals. Kotlowitz will be joined by Eddie Bocanegra, who works for a Chicago public health program, CeaseFire, and who is a subject of the film.

For more information about the ISTSS 27th Annual Meeting, visit the ISTSS website.

For more information about *The Interrupters* visit the film's website at http://interrupters.kartemquin.com.

Trauma and World Literature: William Shakespeare's *Henry IV, Part 1*

Howard J. Lipke, PhD
Wheeling, Illinois

The following scene from Shakespeare's *Henry IV Part 1*, Act 2, Scene 3, between the hero Hotspur and his wife has often been used to illustrate the breadth of the psychological problems related to trauma, as well as how long they have been recognized. Though many readers will be familiar with the Lady's speech, it is so important that we wanted to make sure it was referenced in this column. The prominence of Shakespeare, and this play, do make one wonder how it took our mental health professions so long to formally acknowledge the particular psychological effects of combat.

Hotspur: How now Kate I must leave you within these two hours.

Lady: O my good lord, why are you thus alone?
For what offence have I this fortnight been
A banish'd woman from my Harry's bed?
Tell me, sweet lord, what is't that takes from thee
Thy stomach, pleasure and they golden sleep?
Why does't thou bend they eyes upon the earth,
And start so often when thou sit'st alone?
Why has't thou lost the fresh blood in thy cheeks,
And given my treasures and my rights of thee
To thick-ey'd musing and curst melancholy?
In thy faint slumbers I by thee have watch'd,
And heard thee murmer tales of iron wars,
Speak terms of manage to thy bounding steed,
Cry, "Courage! To the field!" And thou hast talk'd
Of sallies and retires, of trenches, tents.
Of palisadoes, frontiers, parapets,
Of basilisks, of canton, culverin,
Of prisoners' ransom, and of soldiers slain,
And all the currents of a heady fight;
Thy spirit within thee hath been so at war,
And thus hath so bestirr'd thee in thy sleep,
That bed of sweat have stood upon thy brow,
Like bubbles in a late-disturbed stream,
And in a thy face strange motions have appear'd,
Such as we see when men restrain their breath
Of some great sudden hest. O, what portents are these?
Some; heavy business hath my lord in hand,
And I must know.

Reference

Shakespeare, William. *The Riverside Shakespeare: Second Edition Volume One.* New York: Houghton Mifflin, 1997. Pg. 899.

Passages from literature can capture truths about trauma and its survivors. ISTSS members are invited to share a favorite passage or quote from literature that might not be well known, but which offers insight about the psychological effects of trauma or path of healing. Send submissions to Howard Lipke and Harold Kudler at HLipke@aol.com.

Student Section: Brief Reflections from 4 Years in Student Section Leadership

Lynnette A. Averill, MS, ISTSS Student Section Chair
University of Utah

It's early summer 2011 and I'm sitting in my office at home, reflecting on the past few years, trying to come up with the perfect words for the first draft of pre-doctoral internship essays. As I think about what I can say that will set me apart and catch the eye of the training director or staff psychologist reviewing my application amongst the multitude of other qualified applicants, it is very clear how much of a positive impact my involvement in ISTSS has had on my personal and professional development and how much of what I have accomplished stems from my experiences and involvement with ISTSS, either directly or indirectly.

Serving in ISTSS Student Section leadership has been an incredible journey. I had the opportunity to serve two years (2007-2009) as vice-chair and the past two years as chair, and have really enjoyed every moment. Serving in these leadership roles provides students with what I think is one of the best things you can do professionally if you want to work in the field of traumatic stress as you have the chance to learn the inner workings of the organization, be actively involved in conversations related to how to move ISTSS forward, serve as a representative to the Board of Directors and interact and network with the top echelon in the field from across the world, and work closely with many students who will one day become your colleagues.

I strongly encourage students to become involved with ISTSS, whether it is by applying for these positions within the Student Section, being a member of a Special Interest Group (SIG), serving on a committee or task force, submitting a column for *Traumatic StressPoints* or something else. If there is something you are interested in, please look at the website and if you don't see what you are looking for, look at the SIGs, ask someone you know who does something similar, ask Student Section leadership, a board member or submit a question online. I certainly understand that being a student can seem overwhelming in the best of times and finding time to add one more thing can feel impossible, but I assure you, you won't regret your involvement in ISTSS. Additionally, if there is something you would like to see within the Student Section programming, either at the annual conference or online, please let us know. We want this to be your professional home and for you to get out of it what you want and need.

I remember my first ISTSS meeting—Hollywood, 2006. I had my thesis accepted as a poster presentation and met with my future Fulbright host. I was beyond excited to attend (as I am every year) and couldn't wait to be rubbing shoulders with my professional idols and more than 1,200 attendees who are interested in trauma. I was totally terrified about two things during the poster session: (1) that no one would talk to me about my poster and (2) that someone would. As the poster session came to a close and I'd had the opportunity to talk with many people about my work, their work and our mutual interests, I realized that we are all people who have come together with similar interests for the purpose of exchanging ideas and that this is nothing to be scared of, but rather something to embrace.

One of my biggest pieces of advice for student members and new members to ISTSS is if there is someone you want to talk to, please introduce yourself. I've found ISTSS members and conference attendees to be very open, friendly and approachable. Something that is sometimes hard for me to remember is that those who are now experts in the field all started out as students too. They trudged through thesis and dissertation, applied for internship and post-doc, had to work to land their first "real job," etc. The poster sessions are a wonderful venue for introducing yourself and chatting with folks, as they are, by nature intended to be somewhat casual and foster exchange and conversation. I highly encourage students to attend the Student Section Lunch Meeting at the annual conference. This lunch meeting provides a wonderful opportunity to meet and network with fellow students, future colleagues and leaders in the field of traumatic stress studies.

When Heidi La Bash (student section vice-chair) and I introduced the Speed Meeting event last year (based on the idea of speed dating), we received overwhelmingly positive feedback from students; in fact, the only negative feedback we had was that people wished it was longer. This year's Speed Meeting activity will be longer, allowing for more time to interact with the experts. It is our hope that students will be able to learn and grow from this mini-mentorship exercise and feel more comfortable approaching these trauma experts (and others) at the conference and generally feel more a part of the ISTSS family.

To the student members of ISTSS, thank you for the opportunity to serve you for the past four years. It is has been a wonderful journey and invaluable experience for me and I hope that I have helped to progress the section forward in the right direction. I look forward to seeing you in November and welcoming the new leadership. Happy July!

Using Hierarchical Linear Models (HLM) to Investigate Therapist Effects: Basic Model Specification for Beginners

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It has been 13 years since Judith Singer published her landmark paper outlining how to conduct hierarchical models in SAS using PROC MIXED (Singer, 1998). Since that time, the use of mixed models and hierarchical linear modeling (HLM) has become more popular in the behavioral sciences. HLM is commonly used for nested data structures and to investigate change over time; it is a helpful tool to understand and summarize relationships of interest while avoiding some common drawbacks of regular regression and ANOVA. This article is intended for those interested in the basics of HLM model building. It will outline the simplest HLM form, the unconditional model, and discuss the practical application of investigating the presence of therapist effects on patient outcomes (for an empirical example, see Tuerk, Mueller, & Egede, 2008). It will also consider some common misspecification errors that can confound interpretation.

One of the difficulties for students and seasoned researchers learning how to use multilevel models is semantics. The SAS mixed model tradition, the HLM tradition, and to a lesser extent, the growth curve model tradition often employ different terminology to discuss similar or the exact same concepts. Despite this heterogeneity of terms, anyone who understands simple regression (i.e., what intercepts, slopes, and error terms are) has all the aptitude necessary to understand and skillfully use mixed models or HLM. Moreover, in addition to the often cited benefits of HLM (i.e., ability to accommodate unbalanced designs, non-fixed time points of measurement, missing data, and straightforward investigations of cross-level interactions) becoming familiar with HLM methods also can help researchers recognize unquestioned assumptions in their thinking that may be artifacts related to the limitations inherent in traditional statistical models.

Hierarchical models allow researchers to partition variance in outcomes appropriately among factors at different organizational levels (Byrk & Raudenbush, 1992). From this basic statement we are to understand that the paradigm challenges us to study and think about our outcomes of interest within a naturally occurring, ecologically-valid framework, such as patients nested within therapists or repeated assessments nested within patients. Of course, we cannot just assume that an organizational framework we impose on reality is statistically valid just because it seems logical. We need to test it, which we do with an unconditional HLM model.

To illustrate the basics of HLM using an oversimplified example, let us consider a regular regression model used to predict patient treatment outcomes from two different therapists, dummy coded as 0 or 1 (model 1.0).

Model 1.0

$$Y_i = \beta_0 + \beta_1 X_{1i} + \varepsilon_i$$

In the above model:
Y_i = treatment outcome for patient *i*
β_0 = intercept for all patients
β_1 = slope of therapist effect on outcome
X_{1i} = therapist assignment for patient *i*
ε_i = error associated with outcome prediction for patient *i*

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The error term (ε) represents how far off the regression estimation is for patient *i*. But what are the factors that contribute to why the estimation is off at all? There are several possible sources: measurement error associated with the modeled constructs, left over error associated with the estimation of the intercept, and prediction error associated with therapist assignment. All three are locked up in one error term, which is a major limitation of regression; the error term in the model above is like a black hole, all the error in the model falls into it, and once it is in there, no information can come out of it. We cannot partition this error further to understand what accounts for it.

By contrast, HLM models a unique intercept for patient effects on outcomes for each therapist, since patients are nested within therapists (model 2.0). Notice that the intercept coefficient in model 2.0, β_{0j}, is now subscripted by *j*, which denotes a specific therapist. Thus, error attributed to patient effects and error attributed to therapist effects are in different terms (r_{ij} and u_{0j}, respectively). Or in other words, r_{ij} can be thought of as the left over error of a specific patient's score when compared to the mean score for that specific patient's therapist, and u_{0j} can be thought of as the left over error of a specific therapist's mean when compared to the mean of therapist means. Accordingly, the model nests patients along with patient-level error (level-1) within therapists and therapist-level error (level-2).

In HLM parlance, the first step of model building is called an unconditional model because it is not thought of as including specific predictors. Its function is to partition variance in outcomes among level-1 and level-2 unit specifications. In other words, the unconditional model below does not necessarily consider therapist assignment to be a predictor of outcomes; it considers it to be an organizational nesting bin where error might be able to be safely partitioned away from the individual patient level, regardless of whether or not therapists actually have anything to do with heterogeneity of outcomes. Accordingly, in model 2.0, if the variance of u_{0j} is not equal to zero, then there is variation between nesting bins, or therapists.

Additionally, if the variance of the level-2 error is not zero, then it is appropriate to continue HLM modeling, perhaps by investigating how much therapist factors (e.g., education level, therapeutic orientation, etc.) contribute by adding specific therapist-related predictors to the model. On the other hand, if the variance of u_{0j} is zero or very close to zero, then there is very little to no variation between therapists, over and above the variation between patients. In that case, it does not make sense to consider therapist designation as meaningful bins to partition error, and the HLM model should be abandoned for a more parsimonious method. The error terms r_{ij} and u_{0j} are denoted as *random effects.* They are assumed to be normally distributed with a mean of zero. The variance of r_{ij} is designated as σ^2 (sigma squared) and the variance u_{0j} is designated as τ (tao).

Unconditional Model 2.0

Level one: $Y_{ij} = \beta_{0j} + r_{ij}$
Level two: $\beta_{0j} = \gamma_{00} + u_{0j}$

In the above model:
Y_{ij} = outcome for patient *i* nested within therapist *j*
β_{0j} = the unique intercept for therapist *j*
r_{ii} = the level-1 leftover variability after the prediction for patient *i* in therapist *j*, or the uncontrolled effect, or the "random effect," or the within group error
γ_{00} = the mean value of all the therapist intercepts, or the grand mean
u_{0j} = the level-2 uncontrolled for variability in the prediction of intercept for therapist *j*, or the uncontrolled effect, or the "random effect," or between group error

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One way to think about it is that the unconditional model (predicting individual patient outcomes) also turns therapist intercepts (or means) into a secondary object of prediction in the level-2 specification. If therapist means are themselves outcomes, one can then introduce predictors (e.g., therapist education level, caseload size) to account for the variation among therapists. If the variance of the level two error term (τ) is zero, then there is no meaningful variation in therapist intercepts to predict.

In practice, the HLM software output for unconditional models does not show test statistics indicating whether or not τ is different from zero. Rather, differences between model deviances are distributed asymptotically on a chi-square distribution and are used to test the null hypothesis that the simpler model fits the data as well as the more complex model. In other words, the output will denote a chi-square statistic associated with the random effect, u_{0j} and that test statistic will have an associated *p*-value. In this case, statistical significance of that *p*-value would indicate a therapist level effect on outcomes.

Given statistical significance for a therapist effect, the next task is to establish how large the effect is. In this case, the appropriate effect size is the intraclass correlation (ICC). Another way of saying τ is meaningfully different from zero is to say that τ contains a meaningful proportion of the total variance. Since the only other error variance in the model is σ^2, that proportion can be easily denoted as $\tau / (\tau + \sigma^2)$, which is the ICC. In a two-level hierarchical structure, the ICC is defined as the proportion of the variance in the outcome variable that is between the second level units (Kreft & De Leeuw, 1998). If the therapist-level random coefficient were non-significant, or if it were significant but the ICC were extremely small, there would be no further theoretical reason to continue with HLM modeling, as all the variance in outcomes would be due to the patient-level or other unmodeled factors.

Often HLM or other mixed models are presented in research studies without an identification of the ICC. This is problematic because it assumes meaningful effects and does not provide a context for findings. For example, suppose a model is described that jumps to investigating significant effects for a therapist education variable on patient outcomes, and further, that the therapist education effect accounts for 6% of the variance in outcomes. That seems meaningful, but it is much more meaningful if we were to also know that the ICC is .07. If we were to know that only 7% of the variance in outcomes *can* be accounted for by therapist-level effects, then we come to understand that therapist education accounts for almost all of the variance between therapists. On the other hand, if the ICC were .65, we would understand that although therapist education has an effect, there are more important factors at work, or at least that the issue is more complex. On the other hand, if therapist education were a non-significant finding it would be even more important to establish the ICC first to avoid erroneous conclusions.

If the ICC were 0.01 we would understand that there is no reason to even model out specific predictors of therapist effects because there is no real variance to model. In this case, we wouldn't want to dismiss therapist education as unimportant more than just understand that the current sample does not provide enough variance at the therapist level to even ask the question. Just like in other inferential statistical models, large sample sizes can yield statistically significant but meaningless results. Accordingly, significant results should always be accompanied by some measure of effect size. In HLM, the ICC is the simplest effect size; however, as parameters are added to level-1 and level-2, it becomes helpful to estimate between- and within-R^2 type effect sizes for each statistically significant parameter of interest (Snijders & Bosker, 1994).

On a final note, when using HLM to estimate therapist effects there are at least two other common and related categories of potential problems. The first is model misspecification, or level omission. Ecologically valid levels that are not included in a model will, by default, leak variance accounted for into the levels that are modeled. For example, if we nest patients within therapists but neglect to test the sites or institutions that the therapists are nested within, then the size of the therapist effects may be overestimated. The second pitfall is just a retake on correlation vs. causation. Because we may specify and repeatedly refer to level-2 as

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the "therapist level," it is important to remember that level-2, in this case, is just an organizational bin for variance; that is, effects at that level might have nothing to do with therapists and everything to do with the other factors that vary along with therapist specification.

For a broader HLM introduction, refer to: Raudenbush, S.W., & Byrk, A.S. (2002). *Hierarchical linear models: applications and data analysis methods (2nd ed.).* Newbury Park, CA: Sage.

References

Byrk A, & Raudenbush S. (1992). *Hierarchical Linear Models: Applications Analysis Methods.* New York, Sage Publications.

Kreft I. & DeLeeuw J. (1998). *Introducing Multilevel Modeling*. London, Sage Publications.

Luke, D.A. (2004). *Multilevel modeling*. Sage, Thousand Oaks, CA.

Singer, J. (1998). Using SAS PROC MIXED to fit multilevel models, hierarchical models, and individual growth models. *Journal of Educational and Behavioral Statistics, 23*(4), 323-335.

Snijders, T., & Bosker, R. (1994). Modeling variance in two-level models. *Sociological Methods and Research, 22,* 342–363.

Tuerk, P.W., Mueller M. & Egede L. (2008). Estimating Physician Effects on Glycemic Control in the Treatment of Diabetes: Methods, Effects Sizes, and Implications for Treatment Policy. *Diabetes Care, 31,* 869-873.

ISTSS News Briefs

ISTSS Student Section Online Voting Begins SOON!

Voting for the ISTSS student leadership opens soon. You will receive an email providing candidate statements and student member voting instructions. Watch for these important announcement in your email!

Mail ballots will be distributed to student members without email addresses and upon request made to Krista Baran, Administrative Director, 111 Deer Lake Road, Suite 100, Deerfield, IL 60015 or via email to kbaran@istss.org, or via telephone at +1-847-480-9028, ext. 221. Any student member desiring to cast a mail ballot will be accommodated.

ISTSS Welcomes New Administrative Director

ISTSS is excited to have Krista Baran rejoin the staff team as the new administrative director. Krista last worked with ISTSS in 2004. Since transferring from ISTSS, Krista has served as administrative director for the Association of University Technology Managers (AUTM).

Krista has been an integral part of the activities of AUTM over the last seven years, activities that have included involvement in global health initiatives, national and regional meetings and courses, a webinar series, legislative activities, publication of research reports and surveys, implementation of social networking and online resource repositories, and bridging the gap between development of new ideas and their practical application. Krista returns to us with a wealth of experience relevant to ISTSS's new strategic direction.

Krista Baran, Administrative Director

Childhood Trauma and PTSD in Patients with Psychosis

Ingo Schäfer, MD, MPH,
Department of Psychiatry and Psychotherapy, University Medical Center Hamburg-Eppendorf, Hamburg, Germany
Helen L. Fisher, PhD, MRC,
Social, Genetic and Developmental Psychiatry Centre, Institute of Psychiatry, King's College London, London, United Kingdom

Childhood trauma and its consequences has long been a neglected issue in patients with schizophrenia and other psychotic disorders. During the past decade, the interest in this topic has markedly increased. This article provides an overview of the prevalence of childhood trauma and PTSD in patients with psychotic disorders, clinical challenges, and emerging treatments.

Prevalence of childhood trauma

The existing studies suggest a high prevalence of early trauma in patients with psychosis. In a recent review of 20 studies focusing on patients with schizophrenia, Morgan and Fisher (2007) reported a weighted average of 42% child sexual abuse (CSA) in female patients and 28% in males. The weighted averages for child physical abuse (CPA) were 35% and 38% respectively. At least one form of abuse (CSA or CPA) was found in 50% of the patients, irrespective of gender.

Findings on the link between childhood trauma and psychosis

Studies on the link between early traumatic experiences and psychosis are suggestive of such a relationship. Recent research has utilised larger samples that are representative of the population being examined and several longitudinal studies have been undertaken in the past few years (Cutajar et al., 2010, Arseneault et al., 2011). The mechanisms underlying the association between childhood trauma and psychosis remain unclear. Cross-sectional studies have demonstrated that negative perceptions of the self, anxiety and depression partially mediated associations between trauma and psychotic symptoms (Gracie et al., 2007). Moreover, biological mechanisms such as dysregulated cortisol following exposure to childhood trauma (Faravelli et al., 2010), potentially increasing sensitivity to later stress, have recently been investigated.

Posttraumatic Stress Disorder (PTSD)

Consistent with their increased exposure to childhood trauma, high rates of PTSD have been reported for patients with psychotic disorders. In clinical populations of patients with schizophrenia, the prevalence of the disorder is 17-46% (e.g. Gearon et al., 2003; Fan et al., 2008). Psychotic patients with a history of childhood trauma tend to present with a variety of additional problems, similar to that of other populations with childhood trauma. They suffer from impulsivity and suicidal ideation (e.g. Conus et al., 2010), vulnerability to revictimization, more current or lifetime substance abuse (e.g. Garno et al., 2005), as well as higher levels of current depression and anxiety, and more dissociative symptoms (e.g. Schäfer et al., 2008) than patients without these experiences. Mueser et al. (2002) proposed that both the effects of specific PTSD symptoms and of these common correlates of childhood trauma contribute to the more severe clinical course and the worse overall outcome that is observed in psychotic patients with childhood trauma and/or PTSD (Garno et al., 2005, Conus et al., 2010).

Assessment

It is recommended to routinely assess trauma and PTSD among patients with psychosis. In current practice, however, patients are rarely asked about traumatic life events and only about 2% of patients with psychosis receive a documented diagnosis of PTSD (Brady et al., 2003). Barriers to better assessment seem to be a lack of confidence and belief in utility of intervention and some uncertainty amongst clinicians whether patients' reports can be trusted (Salyers et al., 2004). With regard to assessment, research suggests that instruments of childhood trauma and PTSD developed for the general population are also appropriate for use among people with psychosis (Fisher et al., 2011, Schäfer et al., in press).

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Treatment

Initial studies suggest that trauma-specific treatments are as beneficial for patients with psychosis as for other diagnostic groups. Psychotic patients with early and complex trauma can benefit from present-focused treatments with an emphasis on psycho-education, stabilisation, and the development of safe coping skills. Trappler and Newville (2007), for instance, treated 24 patients with chronic schizophrenia and complex PTSD using the first phase of STAIR (Cloitre et al., 2006). A control group of patients received supportive psychotherapy sessions. After 12 weeks of treatment, the patients in the STAIR-group showed significant reductions in Impact of Events Scale scores and positive psychotic symptoms, while no improvement in these was observed in the control group.

Several case studies and open trials reported that exposure-based interventions can also be used safely and effectively in patients with psychosis. Frueh et al. (2009) treated 20 patients with PTSD and either schizophrenia or schizoaffective disorder via an 11-week CBT intervention that consisted of 14 sessions of psycho-education, anxiety management, and social skills training, as well as eight sessions of exposure therapy, provided at community mental health centers. Treatment completers showed significant PTSD symptom improvement, maintained at three-month follow-up. Moreover, significant improvements existed with regard to other targeted domains (e.g., anger, general mental health).

A further approach to treat PTSD in patients with psychosis was developed by Mueser et al. (2008). The 12- to 16-session program combines psycho-education and breathing retraining with cognitive restructuring to address thoughts and beliefs related to trauma experiences and their consequences. In a recent randomised controlled trial the program was compared to treatment as usual in 108 patients with severe mental illness (39% bipolar disorder, schizophrenia or schizoaffective disorder). At six-month follow-up, CBT clients had improved significantly more in PTSD symptoms, perceived health, negative trauma-related beliefs, and case manager working alliance.

Clearly, more research is needed to further develop and evaluate appropriate treatments for psychotic patients with PTSD. Nevertheless, the existing trials suggest that patients with psychotic disorders can benefit from both present-focused and trauma-focused treatments, despite severe symptoms, suicidal thinking, and vulnerability to hospitalizations (Mueser et al., 2008).

Conclusion

Childhood trauma and PTSD are frequent in patients with psychosis and severely affect course and outcome. Initial results on the effects of trauma-specific interventions in patients with psychosis are promising. Given the high prevalence of childhood trauma and PTSD in this group, it is important to further develop and evaluate treatment approaches appropriate for patients with psychosis and implement them into routine practice.

References

Arseneault, L., Cannon, M., Fisher, H.L., Polanczyk, G., Moffitt, T.E., & Caspi, A. (2011). Childhood trauma and children's emerging psychotic symptoms: A genetically sensitive longitudinal cohort study. *American Journal of Psychiatry*, *168*, 65-72.

Brady, S., Rierdan, J., Penk, W., Losardo, M., & Meschede, T. (2003). Post-Traumatic Stress Disorder in Adults with Serious Mental Illness and Substance Abuse. *Journal of Trauma and Dissociation*, *4*, 77-90.

Cloitre, M., Cohen, L.R., & Koenen, K.C. (2006). *Treating Survivors of Childhood Abuse*. London, Guilford Press.

Conus, P., Cotton, S., Schimmelmann, B.G., McGorry, P.D., & Lambert, M. (2010). Pretreatment and outcome correlates of sexual and physical trauma in an epidemiological cohort of first-episode psychosis patients. *Schizophrenia Bulletin*, *36*, 1105-1114.

Cutajar, M.C., Mullen, P.E., Ogloff, J.R., Thomas, S.D., Wells, D.L., & Spataro, J. (2010). Psychopathology in a large cohort of sexually abused children followed up to 43 years. *Child Abuse & Neglect*, *34*, 813-822.

Fan, X., Henderson, D.C., Nguyen, D.D., Cather, C., Freudenreich, O., Evins, A.E., et al. (2008) Posttraumatic stress disorder, cognitive function and quality of life in patients with schizophrenia.

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Members on the Move

Daniel Schechter, MD, of the University of Geneva Faculty of Medicine (Switzerland) and Columbia University College of Physicians and Surgeons was given the Norbert and Charlotte Rieger Award for Psychodynamic Psychotherapy for the paper: "When parenting becomes unthinkable: Intervening with traumatized parents and their toddlers" published in the *Journal of the American Academy of Child & Adolescent Psychiatry* (2009) by the American Academy of Child and Adolescent Psychiatry at the Academy's 57th Annual Meeting in New York on October 28, 2010.

Do you know of ISTSS members who have been recognized for significant achievements?

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Psychiatry Research, *159*,140-146.

Faravelli, C., Amedei, S.G., Rotella, F., Faravelli, L., Palla, A., Consoli, G., et al. (2010). Childhood traumata, dexamethasone suppression test and psychiatric symptoms: A trans-diagnostic approach. *Psychological Medicine*, *40*, 2037-2048.

Fisher, H.L., Craig, T.K., Fearon, P., Morgan, K., Dazzan, P., Lappin, J., et al. (2011). Reliability and comparability of psychosis patients' retrospective reports of childhood abuse. *Schizophrenia Bulletin*, *37*, 546-553.

Frueh, B.C., Grubaugh, A.L., Cusack, K.J., Kimble, M.O., Elhai, J.D., & Knapp, R.G. (2009). Exposure-based cognitive-behavioral treatment of PTSD in adults with schizophrenia or schizoaffective disorder: a pilot study. *Journal of Anxiety Disorders*, *23*, 665-675.

Garno, J.L., Goldberg, J.F., Ramirez, P.M., & Ritzler, B.A. (2005). Impact of childhood abuse on the clinical course of bipolar disorder. *British Journal of Psychiatry*, *186*, 121-125.

Gearon, J.S., Kaltman, S.I., Brown, C., & Bellack, A.S. (2003). Traumatic life events and PTSD among women with substance use disorders and schizophrenia. *Psychiatric Services*, *54*, 523-528.

Gracie, A., Freeman, D., Green, S., Garety, P.A., Kuipers, E., Hardy, A., et al. (2007). The association between traumatic experience, paranoia and hallucinations: a test of the predictions of psychological models. *Acta Psychiatrica Scandinavica*, *116*, 280–289.

. Morgan, C., Fisher, H. (2007). Environment and schizophrenia: environmental factors in schizophrenia: childhood trauma—a critical review. *Schizophrenia Bulletin*, *33*, 3-10.

Mueser, K.T., Rosenberg, S.D., Goodman, L.A., Trumbetta, S.L. (2002). Trauma, PTSD, and the course of severe mental illness: an interactive model. *Schizophrenia Research*, *53*, 123-143.

Mueser, K.T., Rosenberg, S.D., Xie, H., Jankowski, M.K., Bolton, E.E., Lu, W., et al. (2008). A randomized controlled trial of cognitive-behavioral treatment for posttraumatic stress disorder in severe mental illness. *Journal of Consulting and Clinical Psychology*, *76*, 259-271.

Schäfer, I., Spitzer, C., Aderhold, V., & Freyberger, H.J. (2008). Dissociative symptoms in Schizophrenia. In: Moskowitz, A., Schäfer, I., Dorahy, M. *Psychosis, Trauma and Dissociation: Emerging perspectives on severe psychopathology*. London: John Wiley & Sons, 151-160.

Salyers, M.P., Evans, L.J., Bond, G.R., & Meyer, P.S. (2004). Barriers to assessment and treatment of posttraumatic stress disorder and other trauma-related problems in people with severe mental illness: clinician perspectives. *Community Mental Health Journal*, *40*, 17-31.

Schäfer, I., Morgan, C., Demjaha, A., Morgan, K., Dazzan, P., Fearon, P., et al. (in press). Assessment of posttraumatic symptoms in patients with first-episode psychosis. *Journal of Nervous and Mental Disease*.

Trappler, B., & Newville, H. (2007). Trauma healing via cognitive behavior therapy in chronically hospitalized patients. *Psychiatric Quarterly*, *78*, 317-325.

Upcoming Events

September 11 - 14, 2011
"Linking Research, Policy & Practice"
International Conference on Violence, Abuse and Trauma
San Diego, California, USA

October 20 - 22, 2011
"Brain, Mind & Body: Trauma, Neurobiology and the Healing Relationship"
Conference sponsored by the Marion Woodman Foundation and the University of Western Ontario, Department of Psychiatry
London, Ontario, Canada

November 3 - 5, 2011
"Social Bonds and Trauma Through the Lifespan"
ISTSS 27th Annual Meeting with Pre-Meeting Institutes Nov. 2
Baltimore Marriott Waterfront
Baltimore, Maryland, USA

March 28 - 31, 2012
"Being a Healing Presence in a Hurting World"
Association for Death Education and Counseling (ADEC) 34th Annual Meeting
Atlanta, Georgia, USA

April 12 - 15, 2012
"Integrating Mind-Body Connections: Advancing Science, Informing Practice for Anxiety and Related Disorders"
Anxiety Disorders Association of America (ADAA) 32nd Annual Conference
Arlington, Virginia, USA

November 1 - 3, 2012
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