

Trauma and Personality in First Episode Psychosis



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Disclosures

Honoraria have been received from the following companies for participation on advisory boards.

- Sunovion
- Allergan/Abbvie
- Janssen
- Otsuka

There are no relevant ongoing financial relationships to disclose.

This presentation will be reviewing clinical data. Some medication recommendations of may be considered off-label. Other treatment recommendations are based on "ideal circumstances" and may not be readily available in your area.



Objectives

- Trauma & PTSD
- Personality Traits & Disorders
- Management
- Questions



Trauma & PTSD

Adverse Childhood Events and Stressful Life Events

- Adverse Childhood Events (ACE)
- Episodes of abuse, neglect, and household dysfunction occurring in childhood that may have lasting consequences into adulthood.
- E.g. sexual, physical, or emotional abuse, parental conflict, emotional and physical neglect.
- Stressful Life Events
- Dangerous or life-changing events that have occurred for the individual and may alter the trajectory through adulthood.
- E.g. immigration, exposure to war, significant loss in adulthood.



Classification of Childhood Trauma

Physical Abuse

 Infliction of physical injury by a caregiver by any means excluding accidents, circumcision or ear piercing

Sexual Abuse

 An attempt at or sexual contact between a caregiver and a child for financial benefit or sexual gratification

Emotional Abuse

 Constant criticism or humiliation of a child by a caregiver. It also includes unfair treatment due to certain physical features and placing unreasonable expectations/demands on a child

Physical Neglect

 Failure of a caregiver to provide adequate care meeting the child's physical needs and lack of a safe environment

Emotional Neglect

 Failure of a caregiver to attend to a child's emotional needs; never showing emotion during interactions with the child



Connecting Trauma to Psychosis

- The RAISE-ETP study identified that 80% of participants reported at least one traumatic event during their lives. 5% met criteria for a lifetime diagnosis of PTSD and a further 3.7% met sub-threshold criteria.
- In a case-control analysis, the association between ACEs and emergent psychosis had an OR=2.72.
- Transitions to psychosis were associated with some environmental risk with greatest effect attributable to childhood trauma (OR = 34.4).
- Patients with PTSD are five times more likely to be diagnosed with a psychotic disorder than individuals without.
- Stressful life events in the preceding year and especially in the 3 months prior to onset also appear to play a role.



Connecting Trauma to Psychosis

- Clinical characteristics
- Higher hospitalization rates
- Earlier onset of symptoms
- A more relentless course of psychosis and more sever episodes
- Higher rates of treatment failure and noncompliance
- Greater likelihood of mood and behavioral comorbidity
- Greater risk of suicide
- Increased prevalence of comorbid substance use disorders



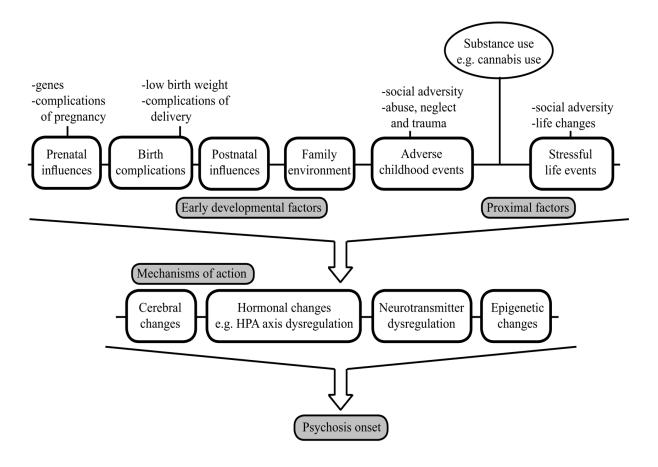
Connecting Trauma to Psychosis

Associations with Symptomatology

- Childhood sexual abuse associated with more severe positive symptoms
- Childhood emotional abuse associated with hallucination and delusions of mind reading
- Growing up in institutional care associated with paranoid ideations
- Life events involving loss associated with delusions of grandiosity
- Life events involving danger/life threatening with depressive delusions
- Traumatic experiences:
 - Lead individuals to have a faulty view of themselves;
 - Construct a fear-based outlook of the world;
 - This leads to suspicion, intrusive thoughts, dissociation, and paranoia as coping mechanisms.

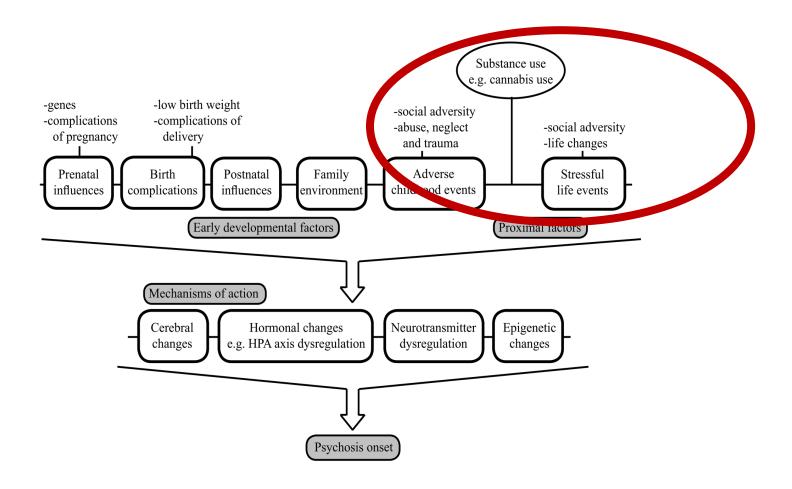


A Model of Risk Factors for Psychosis





A Model of Risk Factors for Psychosis





Underlying Mechanisms: HPA Axis, Neurodevelopment and Epigenetics

- Early stressors dampen the cortisol response, leading to poor stress coping later on in life.
- Alterations in the axis may be associated more directly with psychosis, with a higher baseline of circulating cortisol, therefore leaving less room for a response in a stressful event.
- There appears to be increased metabolic turnover of cortisol and a blunted cortisol response.
- "Normal" emotional circuits develop in the context support from a caregiver, and without such support, these circuits develop faster and become more stable leading to poor emotional functioning in the long term.
- Increased pituitary volumes in individuals with FEP, UHR and family members. Lower hippocampal volumes in individuals with PTSD and psychosis.
- Animal models suggests disrupted gene transcription via epigenetic changes to the glucocorticoid receptor gene promoter leading to disrupted negative feedback system in a later stressful event. It should be noted that these changes can be heritable.
- In people, higher levels of peripheral FKBP5 expression have been observed.
 - FKBP5 is directly involved in modulated HPA activity and appears to be related to both PTSD and psychosis.
- BDNF Val66Met carriers have increased positive psychotic symptoms when exposed to childhood trauma

The First Episode as a Traumatic Event

- Psychosis often involves severe perceptions of threat (e.g. paranoia, delusions of control) and are often
 accompanied by negative emotions such as anger, fear, and distress, and may therefore constitute a
 traumatic event.
- Social exclusion and stigma may also be experienced as a trauma.
- Involuntary hospitalization, and the experience of coercive treatments including involvement with law enforcement, seclusion, restraints and possible forced treatment.
- The institutional experience of being on an acute psychiatric unit and interactions with co-patients may play a role.
- Post acute symptoms can include re-experiencing of the event (memories), avoidance of related stimuli, hyperarousal and can include commonly associated symptoms such as suicidal ideation, loss, entrapment, humiliation, defeat, hopelessness, and anxiety.
- A 2017 meta-analysis reported that 42% of people with FEP displayed clinically relevant PTSD symptoms
 up to 2.5 years following first episode. 30% of individuals were diagnosed with full PTSD within 2 years
 of their first episode and in a sub-analysis the authors found higher rates in individuals with affective
 psychosis and in those admitted to restricted units.

Personality Traits and Disorders

Comorbidity of Personality Disorders

- Rates of comorbidity vary from 17% to 85% depending on study demographics such as location and sample size.
 - In two studies looking at a FEP population, rates of 8.6% (amongst a hospital sample) and 9.5% (in a community sample) were reported.
 - Most common comorbid diagnosis was "borderline personality disorder" or "emotionally unstable personality" at 53% and 75% of the respective study population.
 - ~3:1 ratio of F:M.



Personality and Psychosis

- Poorer prognosis with risk of re-hospitalization as high as 73% within one year.
- 38% of individuals with a premorbid personality diagnosis had engaged in suicide attempts and/or severe self harm.
- Following discharge from an early psychosis intervention program, there is an risk of relapse in individuals with a personality diagnosis with HR=2.96.



Personality And Psychosis

- Sociopathic and Schizoid personality traits have been associated with poor insight and a lack of change in degree of insight over a 6 month period.
- Schizotypal traits appeared to be associated with poor medication adherence.
- Schizoids traits were associated with negative symptoms of psychosis.
- Sociopathic and passive-dependent traits were associated with increased hostility and suspiciousness.
- Obsessional traits appeared to be associated with manic and grandiose features of psychosis.



Borderline Personality & Psychosis

- Adds complexity to the diagnostic process and management
 - May present with more severe hallucinations but not be considered to be part of a primary psychotic disorder and delay diagnosis.
 - Higher prevalence of comorbid substance use.
 - Poorer social supports and increased relational difficulties.
 - More likely to experience depression and engage in self-harm throughout follow-up.
 - Will often have a "longer" journey before engaging with an early intervention program.
 - Will often experience delays in accessing first-line antipsychotic treatment (which would be inconsistent with most EIP guidelines).



Management

Psychotherapy

- When stable, EMDR has been reported to be a safe intervention.
 - Some protocols have been adapted to avoid direct exposure to trauma related stimuli, but there is evidence that unmodified protocols can be safe as well.
 - Benefits include improvement in symptoms of PTSD, auditory and visual hallucinations, delusions, anxiety, and depression. In one study, paranoid ideations and feelings of hopelessness did not appear to improve.
- A modified form of CBTp referred to as Trauma-Informed CBTp integrates CBTp, Trauma-Focused CBT, prolonged exposure therapy and Cognitive Processing therapy to process traumatic psychotic experiences by focusing on the experienced distress rather than on the validity of the experience.



Psychotherapy

- Emotional regulation and Dialectical-Behaviour Therapy remain the treatment of choice for comorbid borderline personality disorder.
- Insight oriented therapies can be more challenging depending on severity of the primary psychotic presentation.
- Therapeutic rapport/alliance remains an integral part of any psychotherapeutic approach.
 - A study reporting on 1st person patient perspectives of treatment highlighted that participants
 were often reluctant to recount traumatic memories and that being in control of how these
 memories are shared and taking the time to build a therapeutic relationship enhanced
 readiness.



Pharmacotherapy

- Antidepressants have a role in the management of mood and anxiety symptoms of PTSD and personality disorders
 - Antidepressants have been associated with neurogenesis in the hippocampus.
- Antipsychotics and mood stabilisers have been shown to have a role in the management of borderline personality disorder by targeting symptoms of affective instability, impulsiveness, and cognitive-perceptual distortions
 - Antipsychotics remain the foundational treatment for the management of psychosis and so its benefit overlaps here.
 - Sodium valproate has shown some potential to reverse epigenetic modifications by inhibition of histone deacetylase (which can impact genetic expression).
- The use of benzodiazepines is discouraged as they may worsen PTSD symptoms.





Q & A

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References

- 1. B Folk J, Tully LM, Blacker DM, et al. Uncharted Waters: Treating Trauma Symptoms in the Context of Early Psychosis. J Clin Med. 2019;8(9). doi:10.3390/jcm8091456
- 2. Ban KY, Osborn DPJ, Hameed Y, et al. Personality disorder in an Early Intervention Psychosis cohort: Findings from the Social Epidemiology of Psychoses in East Anglia (SEPEA) study. *PLoS One*. 2020;15(6):e0234047. doi:10.1371/journal.pone.0234047
- 3. Burke T, Thompson A, Mifsud N, et al. Proportion and characteristics of young people in a first-episode psychosis clinic who first attended an at-risk mental state service or other specialist youth mental health service. *Schizophr Res.* 2022;241:94-101. doi:10.1016/j.schres.2021.12.035
- 4. Campos MS, Garcia-Jalon E, Gilleen JK, David AS, Peralta VMD, Cuesta MJ. Premorbid personality and insight in first-episode psychosis. *Schizophr Bull*. 2011;37(1):52-60. doi:10.1093/schbul/sbq119
- Cragin CA, Straus MB, Blacker D, Tully LM, Niendam TA. Early Psychosis and Trauma-Related Disorders: Clinical Practice Guidelines and Future Directions. Front Psychiatry. 2017;8:33. doi:10.3389/fpsyt.2017.00033
- 6. Cuesta MJ, Gil P, Artamendi M, Serrano JF, Peralta V. Premorbid personality and psychopathological dimensions in first-episode psychosis. *Schizophr Res.* 2002;58(2-3):273-280. doi:10.1016/s0920-9964(01)00395-4
- 7. Cui Y, Piao Y, Kim SW, et al. Psychological factors intervening between childhood trauma and suicidality in first-episode psychosis. *Psychiatry Res.* 2020;293:113465. doi:10.1016/j.psychres.2020.113465
- 8. Cullen AE, Addington J, Bearden CE, et al. Stressor-Cortisol Concordance Among Individuals at Clinical High-Risk for Psychosis: Novel Findings from the NAPLS Cohort. *Psychoneuroendocrinology*. 2020;115:104649. doi:10.1016/j.psyneuen.2020.104649
- 9. DeTore NR, Gottlieb JD, Mueser KT. Prevalence and correlates of PTSD in first episode psychosis: Findings from the RAISE-ETP study. Psychol Serv. 2021;18(2):147-153. doi:10.1037/ser0000380
- 10. Dunkley JE, Bates GW, Findlay BM. Understanding the trauma of first-episode psychosis. Early Interv Psychiatry. 2015;9(3):211-220. doi:10.1111/eip.12103
- 11. Francey SM, Jovev M, Phassouliotis C, Cotton SM, Chanen AM. Does co-occurring borderline personality disorder influence acute phase treatment for first-episode psychosis? *Early Interv Psychiatry*. 2018;12(6):1166-1172. doi:10.1111/eip.12435
- 12. Gairns S, Alvarez-Jimenez M, Hulbert C, McGorry P, Bendall S. Perceptions of clinicians treating young people with first-episode psychosis for post-traumatic stress disorder. *Early Interv Psychiatry*. 2015;9(1):12-20. doi:10.1111/eip.12065

References

- 13. Gleeson JFM, Chanen A, Cotton SM, Pearce T, Newman B, McCutcheon L. Treating co-occurring first-episode psychosis and borderline personality: a pilot randomized controlled trial. *Early Interv Psychiatry*. 2012;6(1):21-29. doi:10.1111/j.1751-7893.2011.00306.x
- 14. Haahr UH, Larsen TK, Simonsen E, et al. Relation between premorbid adjustment, duration of untreated psychosis and close interpersonal trauma in first-episode psychosis. *Early Interv Psychiatry*. 2018;12(3):316-323. doi:10.1111/eip.12315
- 15. Inyang B, Gondal FJ, Abah GA, et al. The Role of Childhood Trauma in Psychosis and Schizophrenia: A Systematic Review. Cureus. 2022;14(1):e21466. doi:10.7759/cureus.21466
- 16. Murphy F, Nasa A, Cullinane D, et al. Childhood Trauma, the HPA Axis and Psychiatric Illnesses: A Targeted Literature Synthesis. Front Psychiatry. 2022;13:748372. doi:10.3389/fpsyt.2022.748372
- 17. Mueser KT, Rosenberg SD. Treating the trauma of first episode psychosis: A PTSD perspective. J Ment Health. 2003;12(2):103-108. doi:10.1080/096382300210000583371
- 18. Misiak B, Karpiński P, Szmida E, et al. Adverse Childhood Experiences and Methylation of the FKBP5 Gene in Patients with Psychotic Disorders. J Clin Med. 2020;9(12). doi:10.3390/jcm9123792
- 19. Mayo D, Corey S, Kelly LH, et al. The Role of Trauma and Stressful Life Events among Individuals at Clinical High Risk for Psychosis: A Review. *Front Psychiatry*. 2017;8:55. doi:10.3389/fpsyt.2017.00055
- 20. Lockwood L, Miller B, Youssef NA. Epigenetics and first-episode psychosis: A systematic review. Psychiatry Res. 2022;307:114325. doi:10.1016/j.psychres.2021.114325
- 21. Lecomte T, Gumley AI, Lysaker PH. Introduction to Special Issue on Psychosis and Personality Disorder. Psychosis. 2012;4(1):1-5. doi:10.1080/17522439.2012.653544
- 22. Kraan T, Velthorst E, Smit F, de Haan L, van der Gaag M. Trauma and recent life events in individuals at ultra high risk for psychosis: review and meta-analysis. *Schizophr Res.* 2015;161(2-3):143-149. doi:10.1016/j.schres.2014.11.026
- 23. Jansen JE, Pedersen MB, Trauelsen AM, Nielsen HGL, Haahr UH, Simonsen E. The Experience of Childhood Trauma and Its Influence on the Course of Illness in First-Episode Psychosis: A Qualitative Study. *J Nerv Ment Dis.* 2016;204(3):210-216. doi:10.1097/NMD.00000000000000449



References

- 24. Peach N, Alvarez-Jimenez M, Cropper SJ, et al. Trauma and the content of hallucinations and post-traumatic intrusions in first-episode psychosis. *Psychol Psychother*. 2021;94 Suppl 2:223-241. doi:10.1111/papt.12273
- 25. Pos K, Boyette LL, Meijer CJ, et al. The effect of childhood trauma and Five-Factor Model personality traits on exposure to adult life events in patients with psychotic disorders. *Cogn Neuropsychiatry*. 2016;21(6):462-474. doi:10.1080/13546805.2016.1236014
- 26. Puntis S, Oke J, Lennox B. Discharge pathways and relapse following treatment from early intervention in psychosis services. BJPsych Open. 2018;4(5):368-374. doi:10.1192/bjo.2018.50
- 27. Roper LJ, Purdon SE, Aitchison KJ. Childhood and later life stressors and psychosis. Clinical Neuropsychiatry: Journal of Treatment Evaluation. 2015;12:148-156.
- 28. Rodrigues R, Anderson KK. The traumatic experience of first-episode psychosis: A systematic review and meta-analysis. Schizophr Res. 2017;189:27-36. doi:10.1016/j.schres.2017.01.045
- 29. Strålin P, Hetta J. First episode psychosis: register-based study of comorbid psychiatric disorders and medications before and after. *Eur Arch Psychiatry Clin Neurosci*. 2021;271(2):303-313. doi:10.1007/s00406-020-01139-6
- 30. Tomassi S, Tosato S. Epigenetics and gene expression profile in first-episode psychosis: The role of childhood trauma. Neurosci Biobehav Rev. 2017;83:226-237. doi:10.1016/j.neubiorev.2017.10.018
- 31. Tong J, Simpson K, Alvarez-Jimenez M, Bendall S. Talking about trauma in therapy: Perspectives from young people with post-traumatic stress symptoms and first episode psychosis. *Early Interv Psychiatry*. 2019;13(5):1236-1244. doi:10.1111/eip.12761
- 32. van den Berg DPG, van der Gaag M. Treating trauma in psychosis with EMDR: a pilot study. J Behav Ther Exp Psychiatry. 2012;43(1):664-671. doi:10.1016/j.jbtep.2011.09.011
- 33. van Nierop M, Lecei A, Myin-Germeys I, et al. Stress reactivity links childhood trauma exposure to an admixture of depressive, anxiety, and psychosis symptoms. *Psychiatry Res.* 2018;260:451-457. doi:10.1016/j.psychres.2017.12.012
- 34. Varese F, Sellwood W, Aseem S, et al. Eye movement desensitization and reprocessing therapy for psychosis (EMDRp): Protocol of a feasibility randomized controlled trial with early intervention service users. *Early Interv Psychiatry*. 2021;15(5):1224-1233. doi:10.1111/eip.13071

