WELCOME
TO THE 15TH ANNUAL
PSYCHOTIC DISORDERS CONFERENCE

NOVEMBER 9, 2020

1:00- 3:30 pm

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Cameron S. Carter, MD

C. Bryan Cameron Presidential Chair in Neuroscience
Distinguished Professor of Psychiatry and Psychology
Director, Behavioral Health Center of Excellence
Director, UC Davis Imaging Research Center
Director, Early Psychosis Clinical and Research Programs

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- Slides and video will be available to participants after the webinar
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- If you would like CME credit, but have not registered on the OCME website, please email bherevia@ucdavis.edu
- To ensure you receive your CME credit, please complete the survey at the end of the conference

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15th Annual Psychotic Disorders Conference, November 9, 2020

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Disclosure of Relevant Financial Relationships
15th Annual Psychosis Disorder Conference, November 9, 2020

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Disclosure of Relevant Financial Relationships
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NAME	COMPANY	RELATIONSHIP
Stephen R. Marder, MD	Merck	Consulting
	Sunovion	Consulting
	Roche	Consulting
	Acadia	Consulting
	Boeringer-Ingelheim	Consulting, Research Support
Stephen M. Strakowski, MD	Sunovion	Chair multiple DSMBs
	Janssen	Contracted Research
	WebMD/Medscape	Contracted Contributor
	Springer	Journal Editor

Disclosure of Relevant Financial Relationships
15th Annual Psychosis Disorder Conference, November 9, 2020

The following persons have disclosed no relevant financial relationships with commercial interests related to this CME activity:

COURSE CHAIR/PLANNER: Cameron Carter, MD

SPEAKERS: Ruth S. Shim, MD

CONTENT VALIDATION: John D. Ragland, MD

Agenda

Time	Description
1:00 – 1:10 pm	Welcome / Introducing Dr. Strakowski Cameron S. Carter, MD
1:10 – 1:45 pm	**Bipolar or Schizoaffective Disorder: Does it Matter?** Stephen M. Strakowski, MD
1:45 –1:55 pm	Questions for Dr. Strakowski / Introducing Dr. Marder
1:55 – 2:30 pm	**Managing Treatment Resistant Psychosis** Stephen R. Marder, MD
2:30 – 2:35 pm	Questions for Dr. Marder
2:35 – 2:40 pm	**Five Minute Break**
2:40 – 2:45 pm	Back from Break / Introducing Dr. Shim
2:45 – 3:20 pm	**Dismantling Structural Racism in the Diagnoses and Management of Psychotic Disorders** Ruth S. Shim, MD, MPH
3:20 - 3:30 pm	Questions for Dr. Shim / Closing Remarks Cameron S. Carter, MD

Bipolar or Schizoaffective Disorder: Does it Matter?

Stephen M. Strakowski, MD.

Bipolar or Schizoaffective Disorder: Does it matter?

Stephen M. Strakowski, MD
Vice Dean for Research
Associate Vice President, Regional Mental Health
Dell Medical School
University of Texas - Austin

Bipolar I Disorder

- Bipolar I disorder is defined by mania (and nothing else).

- DSM-5 definition of mania.
  A. At least 1 week of persistent mood disturbance (elevated, expansive, irritable) AND excessive activation (technically behavioral activation).
  B. Three or more of: grandiosity, decreased need for sleep, pressured speech, racing thoughts, distractibility, increased goal-directed activity/agitation, risky/impulsive behaviors.
  C. Marked functional impairment. (hypomania omits this).
  D. R/o other causes of symptoms.

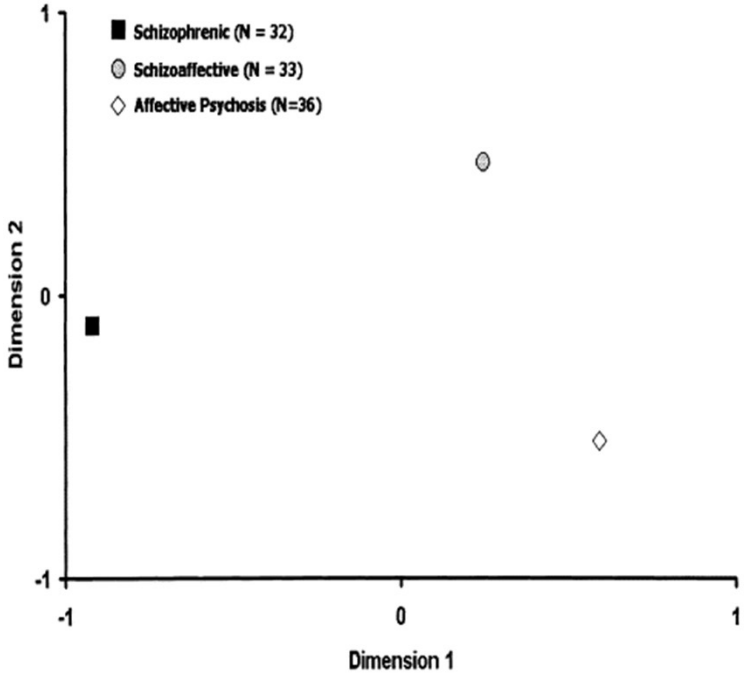
Schizoaffective Disorder

DSM 5 criteria for Schizoaffective Disorder.

- A. Uninterrupted period of an affective episode plus criterion A for schizophrenia (depressive episode must include depressed mood – may be a problem in men…..).
  - Criterion A for schizophrenia: for a significant amount of time during a 1-month period, ≥ 2 of the following, with at least one of first 3 - delusions, hallucinations, disorganized speech, grossly disorganized or catatonic behavior!, negative symptoms.
- B. Hallucinations and delusions for ≥2 weeks w/o mood episode.
- C. Major mood episode for the majority of active and residual illness.
- D. R/o other causes (medical, substance abuse).
  - **Bipolar type**: mania must occur (like BPI)
  - Depressive type: includes only major depressive episodes.

- Classified as a Schizophrenia Spectrum Disorder in DSM 5.
  - Why not an Affective Spectrum Disorder?
  - Note assumed primacy of SCZ despite it being a dx of exclusion….

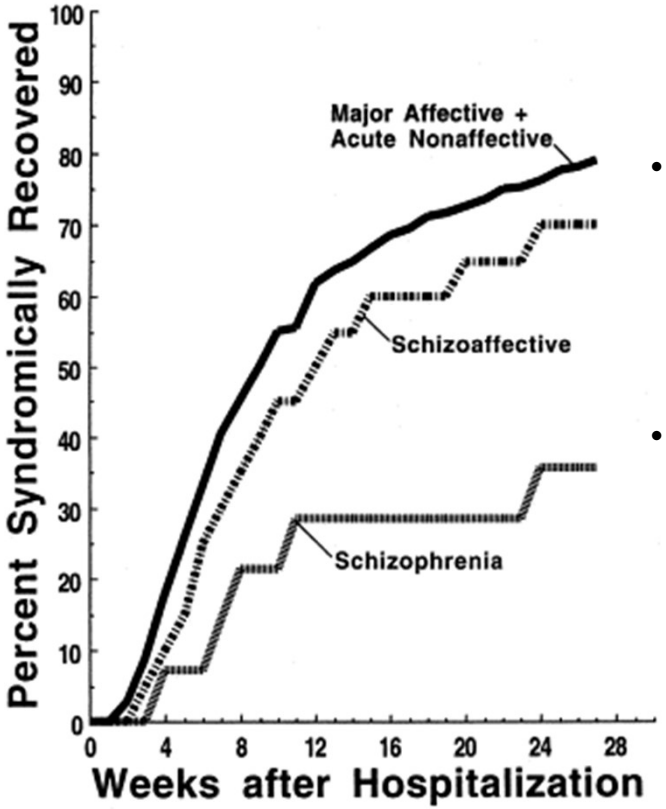
Symptoms in Psychotic Disorders



- DFA found two dimensions that separated groups.
- Dimension1 (78%) loading = mania (0.51), depression (0.42), attention (−0.38), alogia (−0.33).
- Dimension2 (22%) loading = delusions (0.79), hallucinations (0.42).
- Dimension 1 separated SCZ from AD and SCA.
- Dimension 2 separated AD from SCA; SCZ between.
- 57% correctly classified, AD and SCZ better than chance ($p<.01$).
- Continuum on Dim1 (?), not Dim2
- Affective not psychotic d/o spectrum?

Fleck DE, Corey KB, Strakowski SM. Schiz Res 2001, 50:131-132.

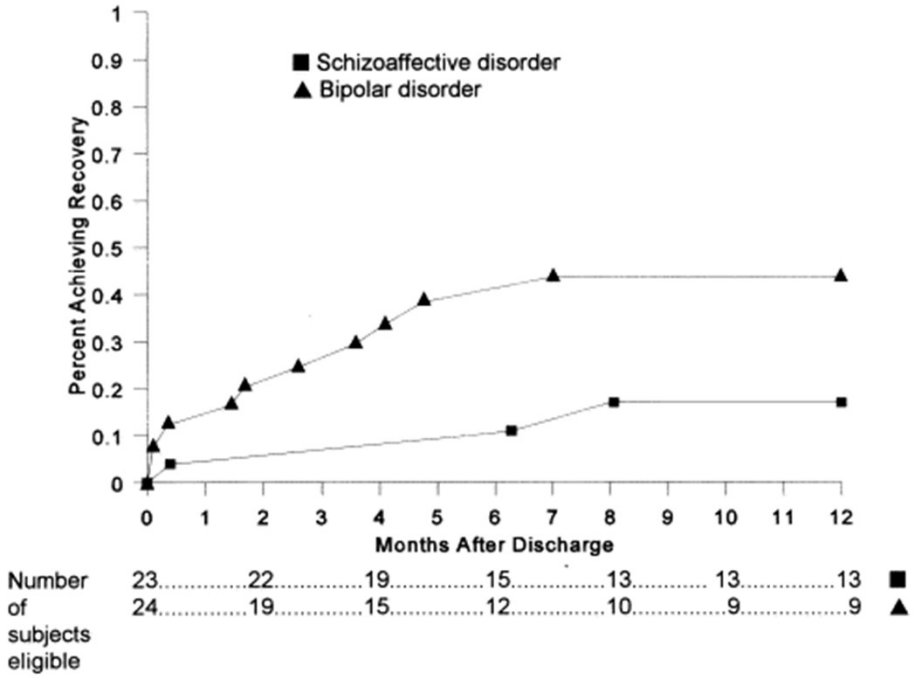
Outcomes: McLean 1st-Episode Psychosis Study



- Number of Subjects:
  - Major affective=172
  - Acute Nonaffective=51
  - Schizoaffective=20
  - Schizophrenia=14
- No differences in functional recovery

Tohen M, Strakowski SM, Zarate Jr., C et al. Biol Psychiatry 2000; 48:467-476.

Outcomes: Cincinnati Mania Study



- Not first episode, SES matched (poor)
- No differences in symptomatic or functional recovery
- SCA 2/3 w/ persistent psychosis & affective sx
- BP 2/3 w/ persistent affective sx only

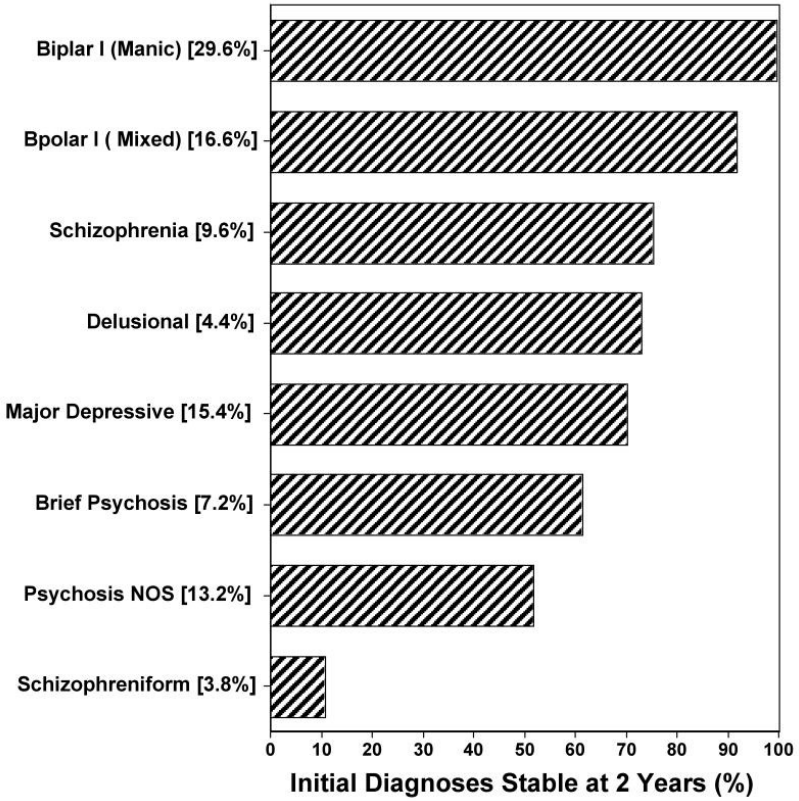
Strakowski SM, Keck Jr., PE, Sax KW, McElroy SL, Hawkins JM. Schiz Res 1999; 35:167-174.

Diagnostic Stability

Baseline	Year 10	10-Year Study Diagnoses (%) Schizophrenia (N=210)	Bipolar Disorder (N=110)	Major Depression (N=48)	Substance-Induced Psychosis (N=29)	Other (N=35)
Schizophrenia (N=126)	Schizophrenia (N=13)	6.2				
	Schizophrenia (N=99)	47.1				
	Bipolar disorder (N=5)		4.5			
	Major depression (N=3)			6.3		
	Substance-induced psychosis (N=1)				3.4	
	Other (N=5)					14.3
Bipolar Disorder (N=95)	Bipolar disorder (N=8)		7.3			
	Bipolar disorder (N=66)		60.0			
	Schizophrenia (N=14)	6.7				
	Major depression (N=1)			2.1		
	Substance-induced psychosis (N=3)				10.3	
	Other (N=3)					8.6
Major Depression (N=77)	Major depression (N=1)			2.1		
	Major depression (N=33)			68.8		
	Schizophrenia (N=23)	11.0				
	Bipolar disorder (N=11)		10.0			
	Substance-induced psychosis (N=4)				13.8	
	Other (N=5)					14.3

Bromet et al. Am J Psychiatry 2011; 168:1186-1194.

Diagnostic Stability: McLean Study DSM-IV (500)



Salvatore et al. JCP 2009; 70:458-466.

Only 1 subject with SCA

Diagnostic Stability: McLean Study DSM-IV (500)

Categorical outcomes of diagnoses during follow-up

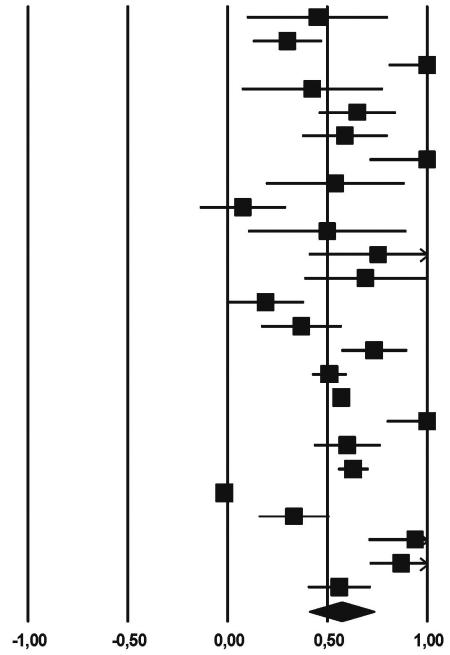
New Categories	*From Non-Affective*	*From Affective*	*From Schizoaffective*	*From All Sources*
To affective	16/81 (19.8%)	16/31 (51.6%)	0 (0.00%)	32/112 (6.40%)
To non-affective	19/81 (23.5%)	1/31 (3.20%)	0 (0.00%)	20/112 (4.00%)
To SCA	46/81 (56.8%)	14/31 (45.2%)	0 (0.00%)	60/112 (12.0%)
All changes	81/191 (42.4%)	31/308 (10.1%)	0 (0.00%)	112/500 (22.4%)
Stable diagnoses	110/191 (57.6%)	277/308 (89.9%)	1/1 (100%)	388/500 (77.6%)

In other studies, <50% of initial SCA diagnoses are stable.

Salvatore et al. JCP 2009; 70:458-466. N.B. With ICD-10, more SCA, 100% stable (same trend in).
Salvatore et al. JCP 2011; 72:183-193. Mahli GS, Green M, Fagiolini A, et al. Bipolar Disord 2008; 10:215-230.

Interrater reliability of schizoaffective disorder

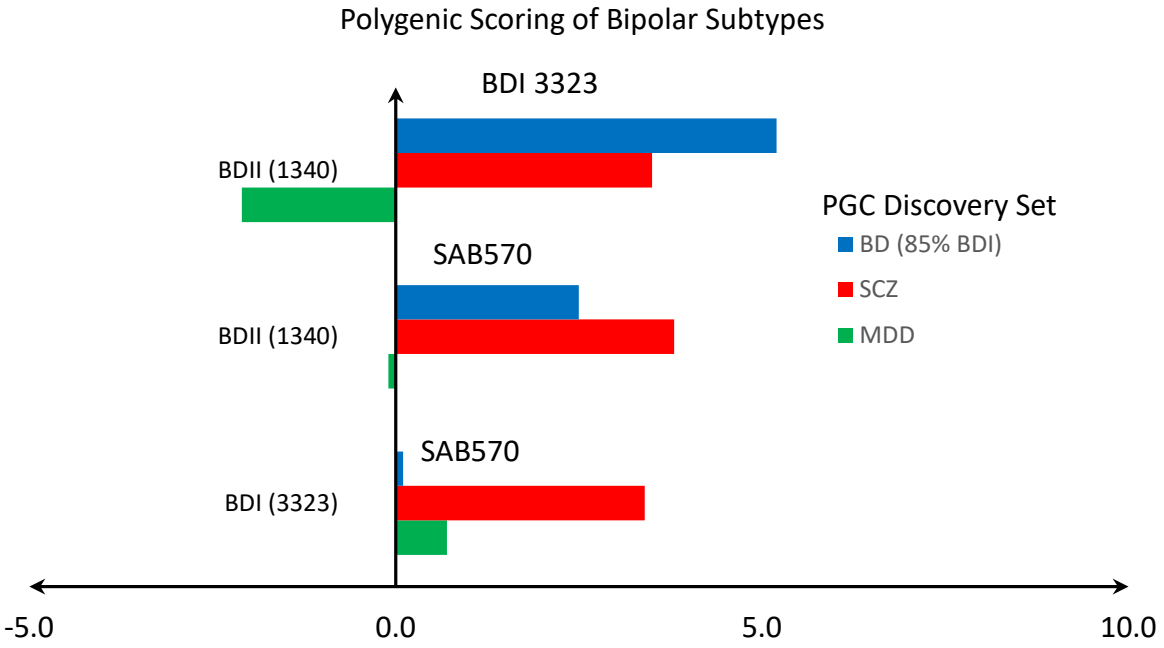
Study name	Mean	Standard error	Lower limit	Upper limit	p-Value	Relative weight
Andreasen et al. 1992	0,450	0,181	0,095	0,805	0,013	3,60
Brockington et al. 1982	0,300	0,089	0,126	0,474	0,001	4,13
Bronisch et al. 1982	1,000	0,099	0,806	1,194	0,000	4,09
Cardno et al. 2012	0,425	0,181	0,070	0,780	0,019	3,60
Cheniaux et al. 2009	0,650	0,099	0,456	0,844	0,000	4,09
Flaum et al. 1998	0,588	0,110	0,372	0,804	0,000	4,03
Folgeson et al. 1991	1,000	0,148	0,710	1,290	0,000	3,81
Freyberger et al. 1990	0,540	0,178	0,191	0,889	0,002	3,62
Hiller et al. 1993	0,077	0,111	-0,141	0,295	0,488	4,03
Joo et al. 2004	0,500	0,203	0,102	0,898	0,014	3,44
Kitamura et al. 1986	0,755	0,178	0,406	1,104	0,000	3,62
Lazartigues et al. 1991	0,691	0,157	0,383	0,999	0,000	3,76
Okasha et al. 1993	0,190	0,099	-0,004	0,384	0,055	4,09
Palacio et al. 2004	0,370	0,104	0,166	0,574	0,000	4,06
Preisig et al. 1999	0,735	0,085	0,568	0,902	0,000	4,15
Regier et al. 1994 (US and Canada)	0,510	0,045	0,422	0,598	0,000	4,29
Regier et al. 1994 (Rest of the world)	0,570	0,022	0,527	0,613	0,000	4,33
Roca et al. 2007	1,000	0,104	0,796	1,204	0,000	4,06
Roy et al. 1997	0,600	0,086	0,431	0,769	0,000	4,15
Sartorius et al. 1995	0,630	0,040	0,552	0,708	0,000	4,30
Schmid et al. 1974	-0,016	0,011	-0,038	0,006	0,146	4,34
Spitzer et al. 1975	0,333	0,091	0,155	0,511	0,000	4,12
Spitzer et al. 1978 (Study A)	0,940	0,120	0,705	1,175	0,000	3,98
Spitzer et al. 1978 (Study B)	0,870	0,081	0,711	1,029	0,000	4,17
Spitzer et al. 1979	0,560	0,081	0,401	0,719	0,000	4,17
	0,569	0,083	0,406	0,731	0,000	



N.B. Bipolar I disorder kappa= 0.82; Schizophrenia kappa=0.80

Santelman et al. Schiz Res 2016; 176:557-563.

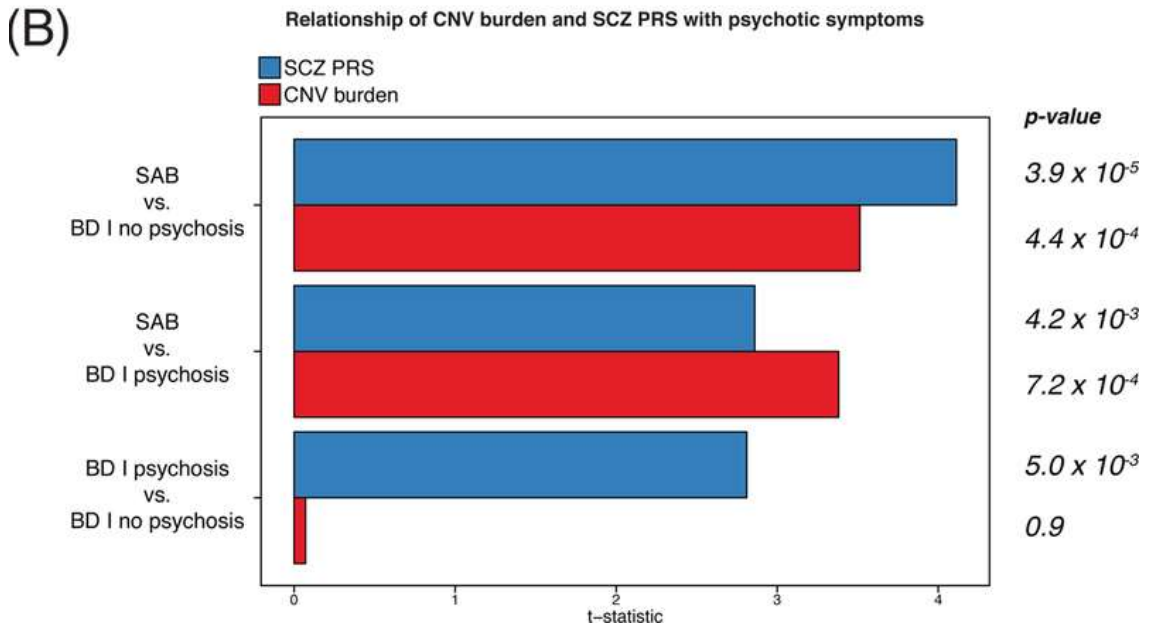
Genetics: International Cohort Collection for Bipolar Disorder



- Identified 8 genome-wide significant, associated regions.
- Significant difference in heritability of BD I from BD II (p=.02).
- BD I and BD II genetic correlation = 0.78.

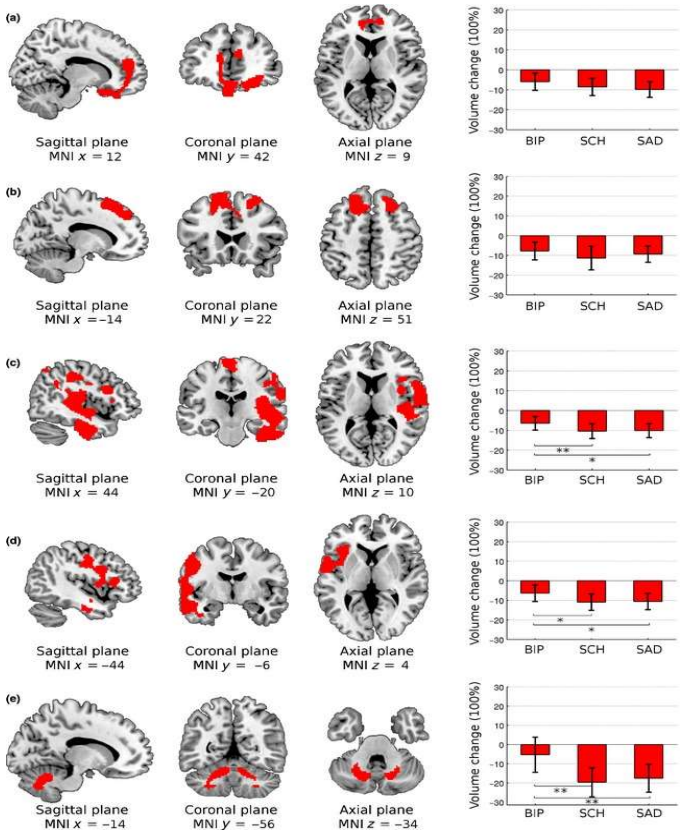
Charney AW et al. Transl Psychiatry 2017; 7:e993.

Genetics: International Cohort Collection for Bipolar Disorder



- Burden of rare copy number variants (CNV, frequency <1%) greater than 500 KB and schizophrenia polygenic risk scores (SCZ PRS) in schizoaffective disorder bipolar type (SAB) versus bipolar I disorder (BD).
- Ns: 3833 BD I (2676 w/ psychosis), 1436 BD II, 579 SAB and 8656 healthy controls.
- No differences between bipolar and control subjects. SAB different from all groups.

Neuroimaging



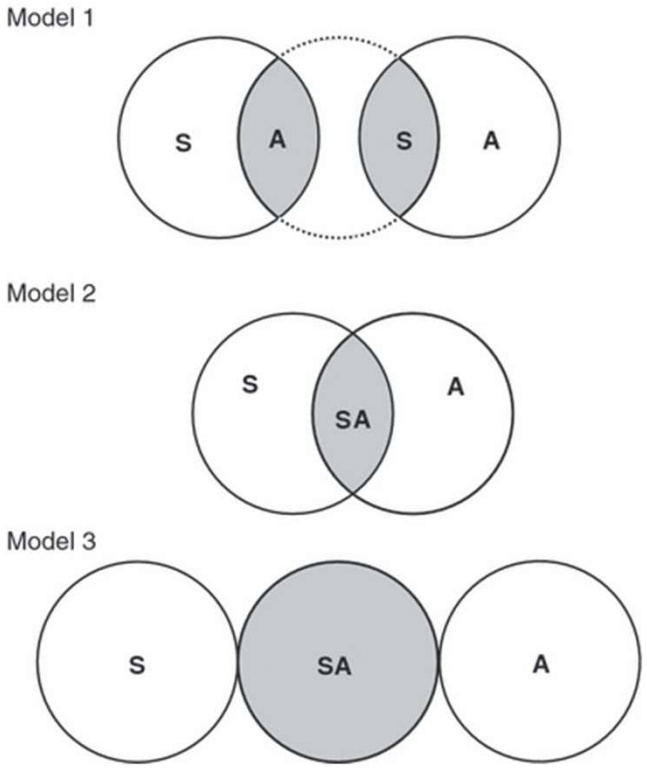
- 45 each w/ SCA, SCZ, BPD and healthy.
- Applied both DSM-IV and RDC.
- SCA mixed bipolar/depressed types
- FSL-VBM analysis (so exploratory); p<.01 corrected
- BPD no areas of reduced volumes v healthy.
- 5 regions showed volume reductions in combined patient v. healthy groups.
- Authors' conclusion: SCA more like SCZ.

- N.B. In small (n=12/group) study, we found similar enlarged striatal volumes v healthy subjects in SCA (bipolar type predominatnly) and BPD.

- Insufficient studies to really make a conclusion….

Amann BL et al. Acta Psychiatr Scand 2016; 133:23-33; Getz et al. Schiz Res 2002; 55:55-59.

Models



Mahli GS, Green M, Fagiolini A, et al. Bipolar Disord 2008; 10:215-230.

Treatment

- Very limited treatment studies, as schizoaffective disorder tends to be lumped into either schizophrenia and bipolar disorder trials.\
- SCA bipolar type = bipolar I disorder (with psychosis perhaps).
- SCA depressed type = psychotic depression (?SCZ maintenance).
- Remember, lithium is antipsychotic in BPD but ineffective in SCZ.
- VPA may be useful in SCZ.
- Thoughtful trial and error, minimizing polypharmacy, maximizing prevention and tolerability.
- Err on the side of treating like a mood disorder (and don’t forget psychotherapies etc.)

Lindenmayer JP, Kaur A. Drugs 2016; 76:589-604. (Review).
Mahli GS, Green M, Fagiolini A, et al. Bipolar Disord 2008; 10:215-230.
Keck PE, McELroy SL, Strakowski SM. Schiz Res 1999; 35(S):5-12. (Review)
Baethge C, Bruschka P, Berghofer A et al. J Affect Disord 79:43-50. (lithium and CBZ effective for maintenance).

Implicit Bias

- It is well established African Americans are over-diagnosed with schizophrenia in US (and UK) clinical samples.
  - Assume a 'rightward shift' in general (so SCA over-diagnosed as well).
- Psychotic symptoms are over-emphasized in African Americans.
  - Affective symptoms minimize.
  - Trauma missed.
- The 'Schiz-' label risks easy transition to SCZ, particularly if psychotic symptoms over-emphasized.

Gara MA …..Strakowski SM. Psychiatr Serv 2019; 70:130-134.
Akinhanmi MO, Biernacka JM, Strakowski SM et al. Bipolar Disord 2018; 20:506-514.
Gara MA….Strakowski SM. Arch Gen Psychiatry 2012; 69:593-600.
Arnold LM….Strakowski SM. Schizophr Res 2004; 67:207-212.
Strakowski SM et al. JCP 1997; 58:457-463.

Conclusions

- We just plain don't know much about schizoaffective disorder.
- What you think it is depends on what you study (SCZ or BPD) and whether you are a lumper or a splitter.
- Treatment should be guided with assumptions of best prognosis considerations.
- Watch out for implicit bias.
- Keep improving our understand of the dimensions of mania, depression and psychosis.

Strakowski SM. Chapter 3: Epidemiology of Bipolar Disorder. In: *Bipolar Disorder: OAPL*. NY: Oxford University Press. 2014.
Merikangas KR et al. Lifetime and 12-month prevalence of bipolar spectrum disorder in the National Comorbidity Survey replication. JAMA Psychiatry 2007; 64:543-552.
Perlis RH et al. Retrospective age at onset of bipolar disorder and outcome during two-year follow-up: results from the STEP-BD study. Bipolar Disorder 2009; 11:391-400.

Managing Treatment Resistant Psychosis

Stephen R. Marder, MD.

Managing Treatment Resistant Psychosis

Stephen R. Marder, MD

Daniel X. Freedman Professor of Psychiatry

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Los Angeles, California

Stephen R. Marder, MD

Disclosures:

Consultation for Boeringer-Ingelheim, Lundbeck, Otsuka, Takeda, Teva, Roche, Genentech, Targacept, Forum, Abbvie, Allergan, Neurocrine

Research Support from Boeringer-Ingelheim, Takeda, Neurocrine

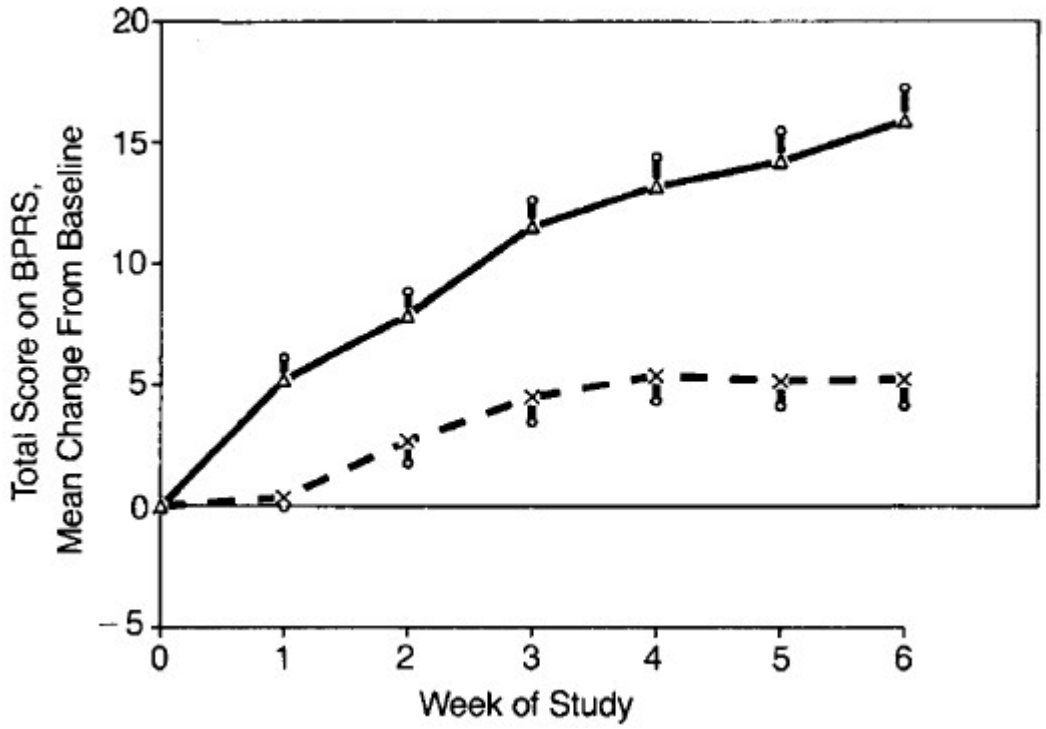
SEMEL INSTITUTE UCLA

Original Articles

Clozapine for the Treatment-Resistant Schizophrenic

A Double-blind Comparison With Chlorpromazine

John Kane, MD; Gilbert Honigfeld, PhD; Jack Singer, and the Clozaril



Comment

Who Should Receive Clozapine?

Stephen R. Marder, MD, Theodore Van Putten, MD

Prevalence of Treatment Resistant Schizophrenia (TRS)

- Some patients show no initial response to treatment
  - 10%-23% of patients have TRS from illness onset
- Patients may initially respond to treatments
  - But 30%-60% become partially responsive or resistant to treatment!

Managing Treatment Resistant Psychosis

- Are there biological differences between treatment resistant and treatment responsive patients?
- How can clinicians identify these individuals?
- Effectiveness of common approaches to treatment resistance
- Effective use of clozapine
- When medications reach their limits

Patients with TRS may exhibit normal dopamine activity but higher glutamate activity

- TRS may be associated with "normal" not hyperactive dopamine synthesis and release in the striatum
- TRS may be associated with elevated glutamate levels in key brain regions
- Therefore, dopamine D2 receptor antagonism may not influence TRS symptoms

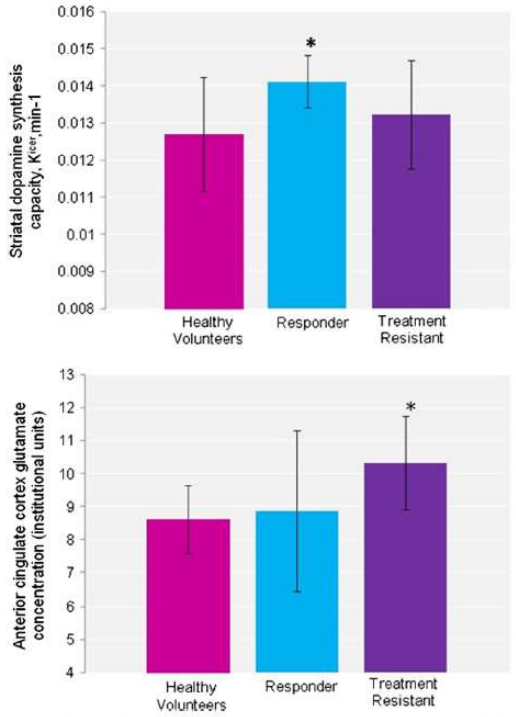


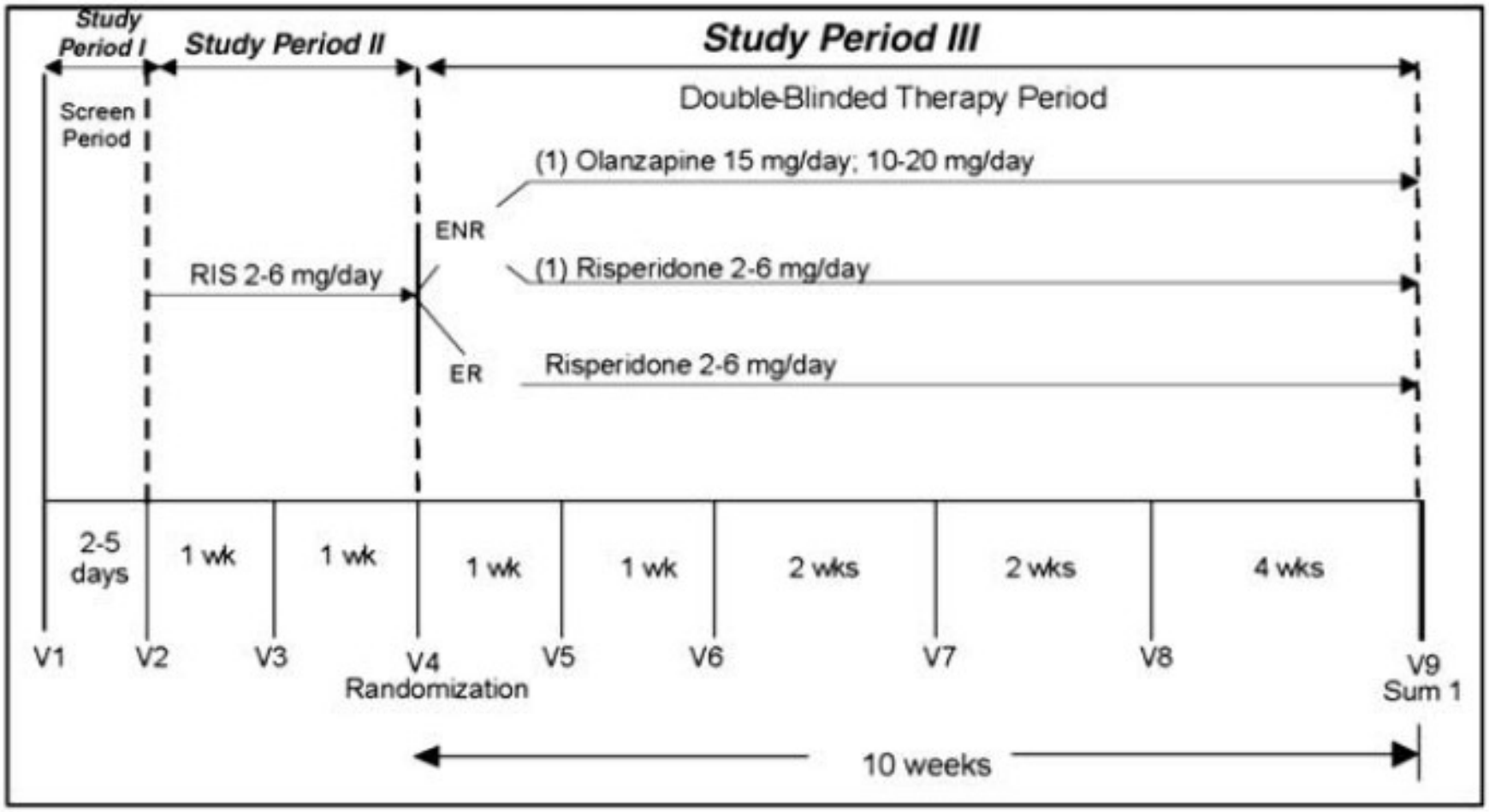
Figure 1. Striatal dopamine function (3,4-dihydroxy-6-[^{18}F]fluoro-L-phenylalanine influx rate constant, k_i^{cer}, min^{-1}) and anterior cingulate glutamate concentration (institutional units) in each group. *Significant group difference relative to healthy volunteers (*t* test, two-tailed, $p < .05$).

Demjaha et al. Biol Psychiat 2014

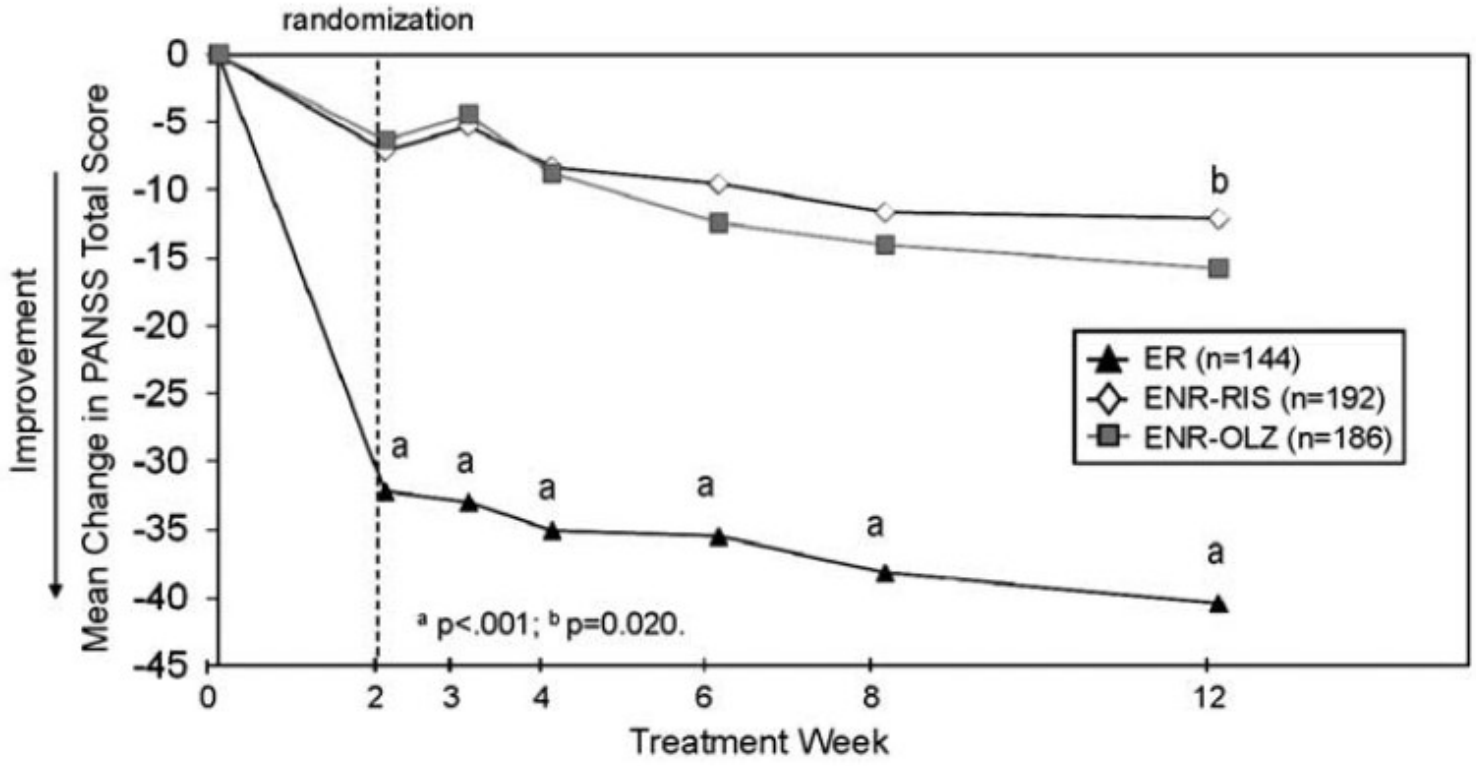
Managing Treatment Resistant Psychosis

- Are there biological differences between treatment resistant and treatment responsive patients?
- ***How can clinicians identify these individuals?***
- Effectiveness of common approaches to treatment resistance
- Effective use of clozapine
- When medications reach their limits

Early Response as a Clinical Marker
Kinon et al 2010



Early Response (Kinon et al)



Early Improvement As a Predictor of Later Response to Antipsychotics in Schizophrenia: A Diagnostic Test Review

Myrto T. Samara, M.D., Claudia Leucht, M.D., Mariska M. Leeflang, Ph.D., Ion-George Anghelescu, M.D., Young-Chul Chung, Ph.D., M.D., Benedicto Crespo-Facorro, Ph.D., M.D., Helio Elkis, Ph.D., M.D., Kotaro Hatta, Ph.D., M.D., Ina Giegling, Ph.D., John M. Kane, M.D., Monica Kayo, M.D., Martin Lambert, M.D., Ching-Hua Lin, Ph.D., M.D., Hans-Jürgen Möller, Ph.D., M.D., José María Pelayo-Terán, Ph.D., M.D., Michael Riedel, M.D., Dan Rujescu, Ph.D., M.D., Benno G. Schimmelmann, M.D., Alessandro Serretti, Ph.D., M.D., Christoph U. Correll, M.D., Stefan Leucht, M.D.

Objective: How long clinicians should wait before considering an antipsychotic ineffective and changing treatment in schizophrenia is an unresolved clinical question. Guidelines differ substantially in this regard. The authors conducted a diagnostic test meta-analysis using mostly individual patient data to assess whether lack of improvement at week 2 predicts later nonresponse.

Method: The search included EMBASE, MEDLINE, BIOSIS, PsycINFO, Cochrane Library, CINAHL, and reference lists of relevant articles, supplemented by requests to authors of all relevant studies. The main outcome was prediction of nonresponse, defined as <50% reduction in total score on either the Positive and Negative Syndrome Scale (PANSS) or Brief Psychiatric Rating Scale (BPRS) (corresponding to at least much improved) from baseline to endpoint (4–12 weeks), by <20% PANSS or BPRS improvement (corresponding to less than minimally improved) at week 2. Secondary outcomes were absent cross-sectional symptomatic remission and <20% PANSS or BPRS reduction at endpoint. Potential moderator variables were examined by meta-regression.

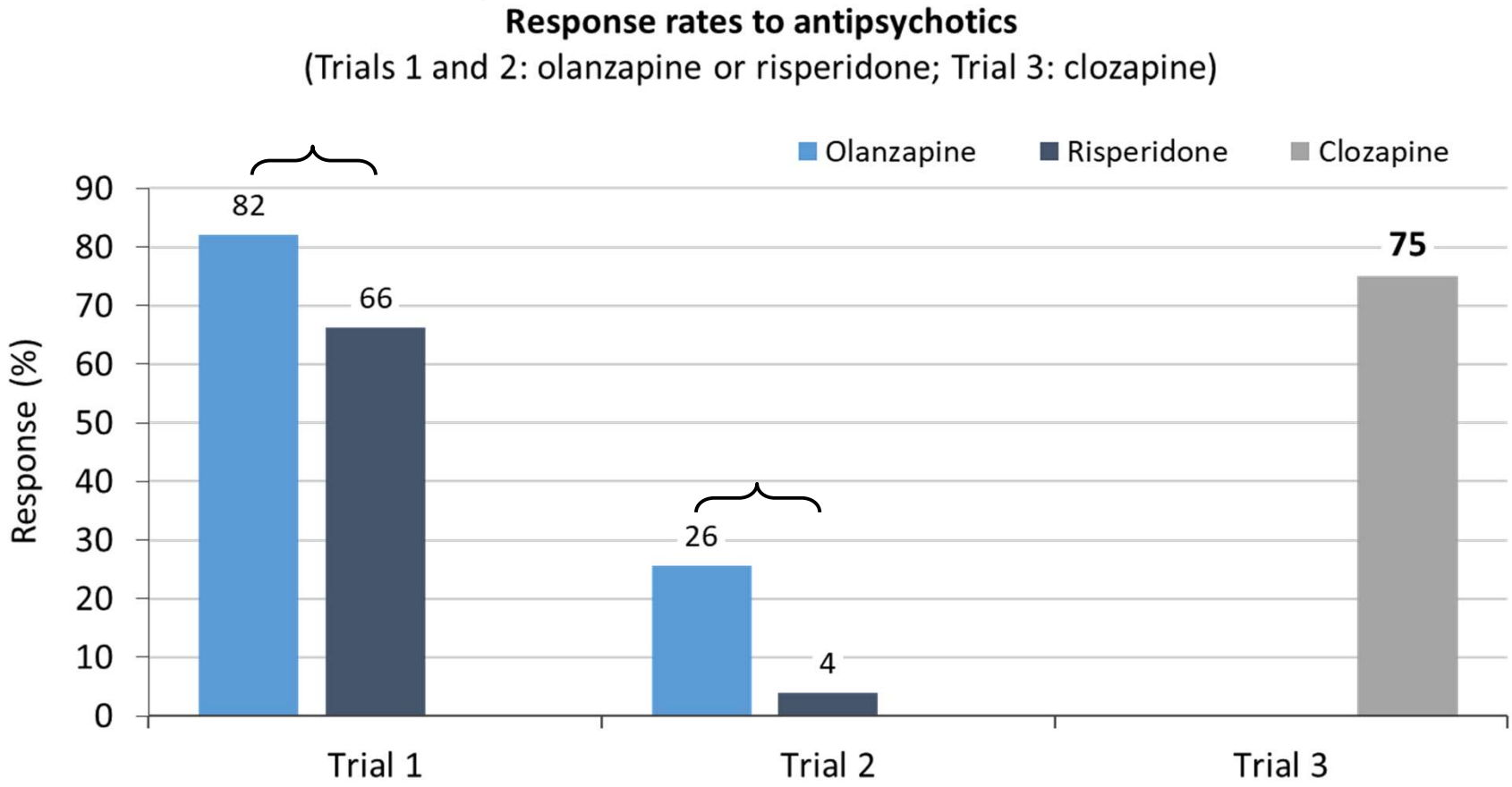
Results: In 34 studies (N=9,460) a <20% PANSS or BPRS reduction at week 2 predicted nonresponse at endpoint with a specificity of 86% and a positive predictive value (PPV) of 90%. Using data for observed cases (specificity=86%, PPV=85%) or lack of remission (specificity=77%, PPV=88%) yielded similar results. Conversely, using the definition of <20% reduction at endpoint yielded worse results (specificity=70%, PPV=55%). The test specificity was significantly moderated by a trial duration of <6 weeks, higher baseline illness severity, and shorter illness duration.

Conclusions: Patients not even minimally improved by week 2 of antipsychotic treatment are unlikely to respond later and may benefit from a treatment change.

Am J Psychiatry 2015; 172:617–629; doi: 10.1176/appi.ajp.2015.14101329

Patients who are not minimally improved after 2 weeks of an antipsychotic, are unlikely to respond unless there is a change.

TRS as a separate entity – Lack of response after switching



TRS=treatment-resistant schizophrenia.

Agid, et al. *J Clin Psychiatry.* 2011;72(11):1439-1444

Managing Treatment Resistant Psychosis

- Are there biological differences between treatment resistant and treatment responsive patients?
- How can clinicians identify these individuals?
- ***Effectiveness of common approaches to treatment resistance***
- Effective use of clozapine
- When symptoms persist with clozapine

Common Approaches to TRS

- Antipsychotic Polypharmacy (20-40% of patients)
- High Doses (10-30%)
- Mood stabilizers, Antidepressants, Anxiolytics (50-60%)
- Clozapine (2-5%)

High Doses

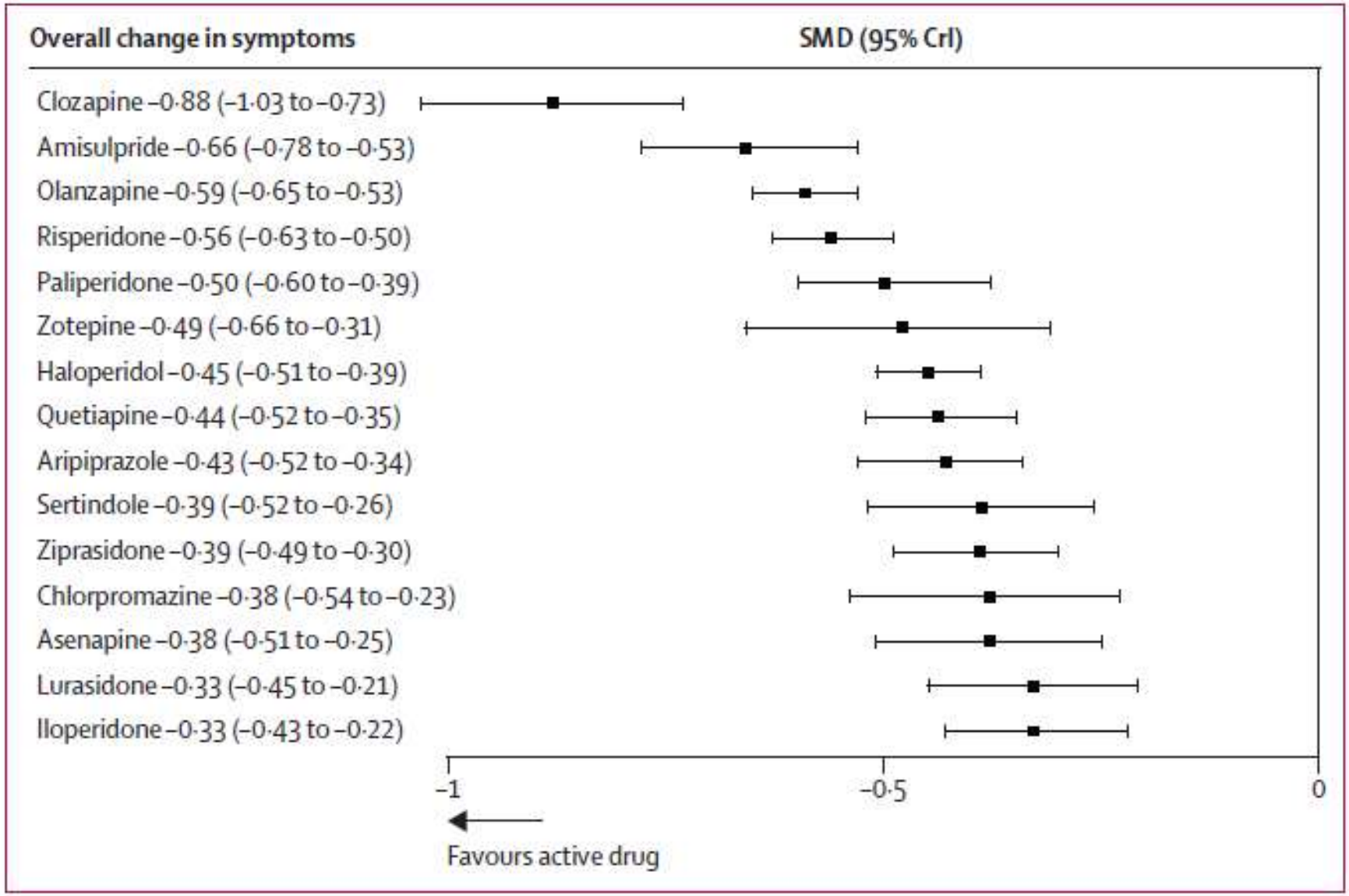
- There is no convincing evidence that doses of antipsychotics higher than those recommended are more effective than standard doses (Davis and Chen 2004)
- *High-dose antipsychotic medication should be initiated as a limited individual trial, reviewed regularly, and if there is no improvement after three months there should be a return to standard dosage* (Royal College of Psychiatrists 2006)

Combinations with antipsychotics

- Increasingly common but very little evidence
  - Little support for adding mood stabilizers
- Best studied are drugs to supplement clozapine
  - Mixed results for risperidone added to clozapine
  - Some evidence for lamotrigine with clozapine

Managing Treatment Resistant Psychosis

- Are there biological differences between treatment resistant and treatment responsive patients?
- How can clinicians identify these individuals?
- Effectiveness of common approaches to treatment resistance
- ***Effective use of clozapine***
- When medications reach their limits



Lancet 2013; 382: 951–62

Schizophrenia PORT 2009

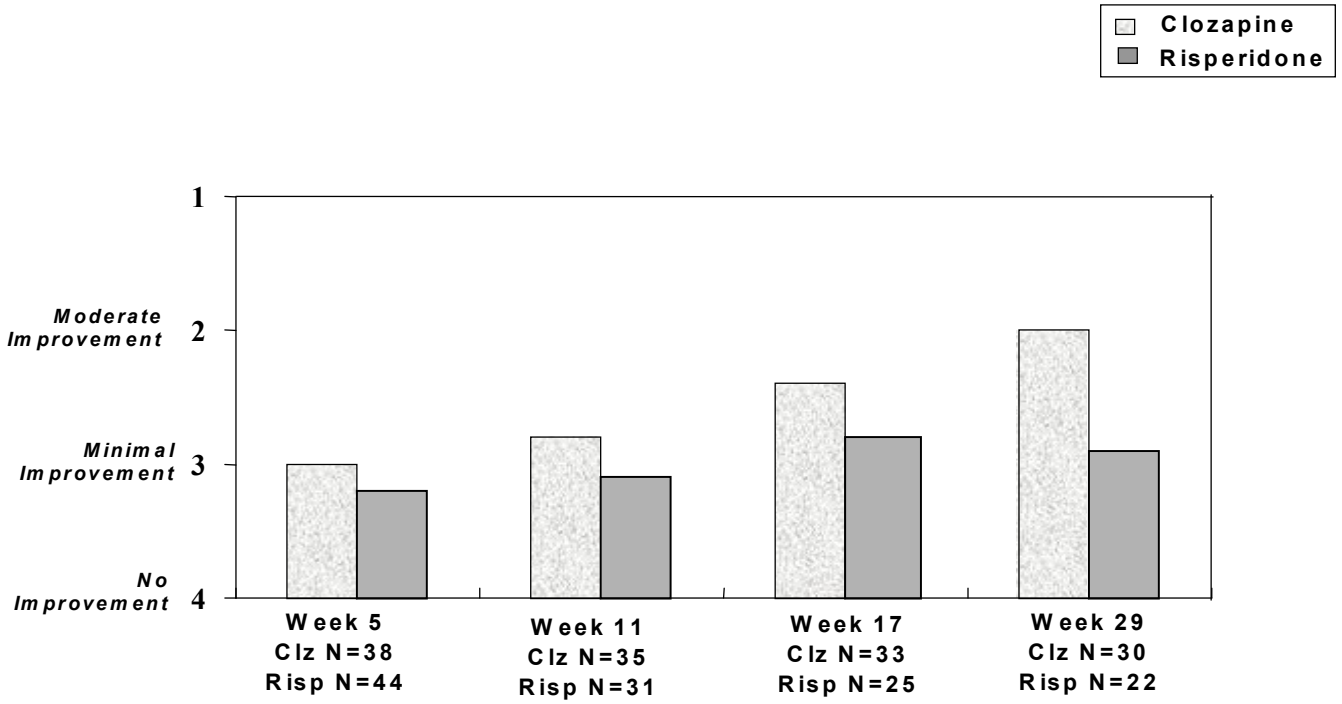
Recommendation. Clozapine should be offered to people with schizophrenia who continue to experience persistent and clinically significant positive symptoms after 2 adequate trials of other antipsychotic agents. A trial of clozapine should last at least 8 weeks at a dosage from 300 to 800 mg/day.

Clozapine and Risperidone in Moderately Refractory Schizophrenia: a Six-month Double-blind Comparison

NR Schooler, SR Marder, MD, KNR Chengappa, G. Petrides, D Ames, WC Wirshing, M McMeniman, RW Baker, H Parepally, D Umbricht, JM Kane

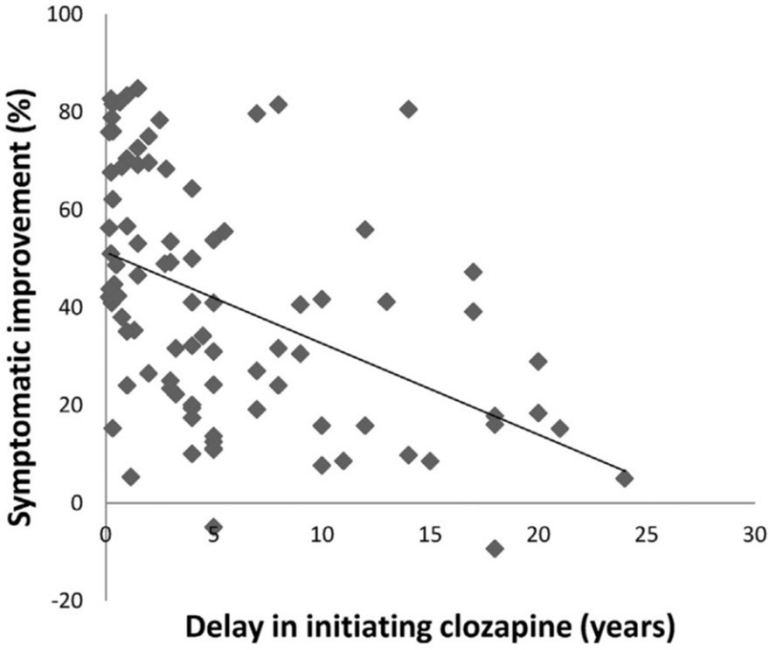
- 107 schizophrenia pts from Zucker-Hillside, U of Pittsburgh, and UCLA
- Outpatients with moderately refractory schizophrenia
- Risperidone (target dose 6 mg) vs clozapine (target 500mg)

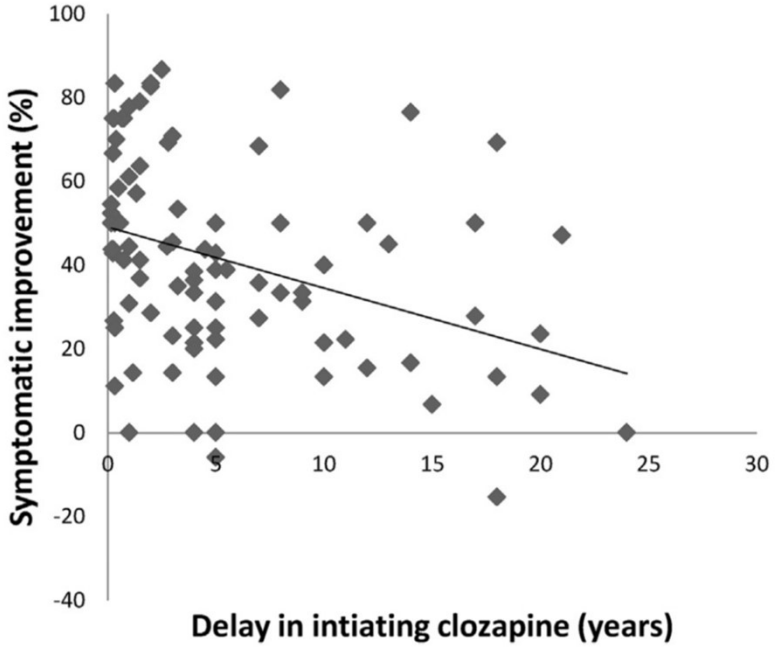
Doctor's Rating of Improvement (CGI). Clozapine versus risperidone over time. Treatment x Week (*F* = 12.02, df 1, 839, p <.001).



Delayed Clozapine Initiation & Symptomatic Outcomes

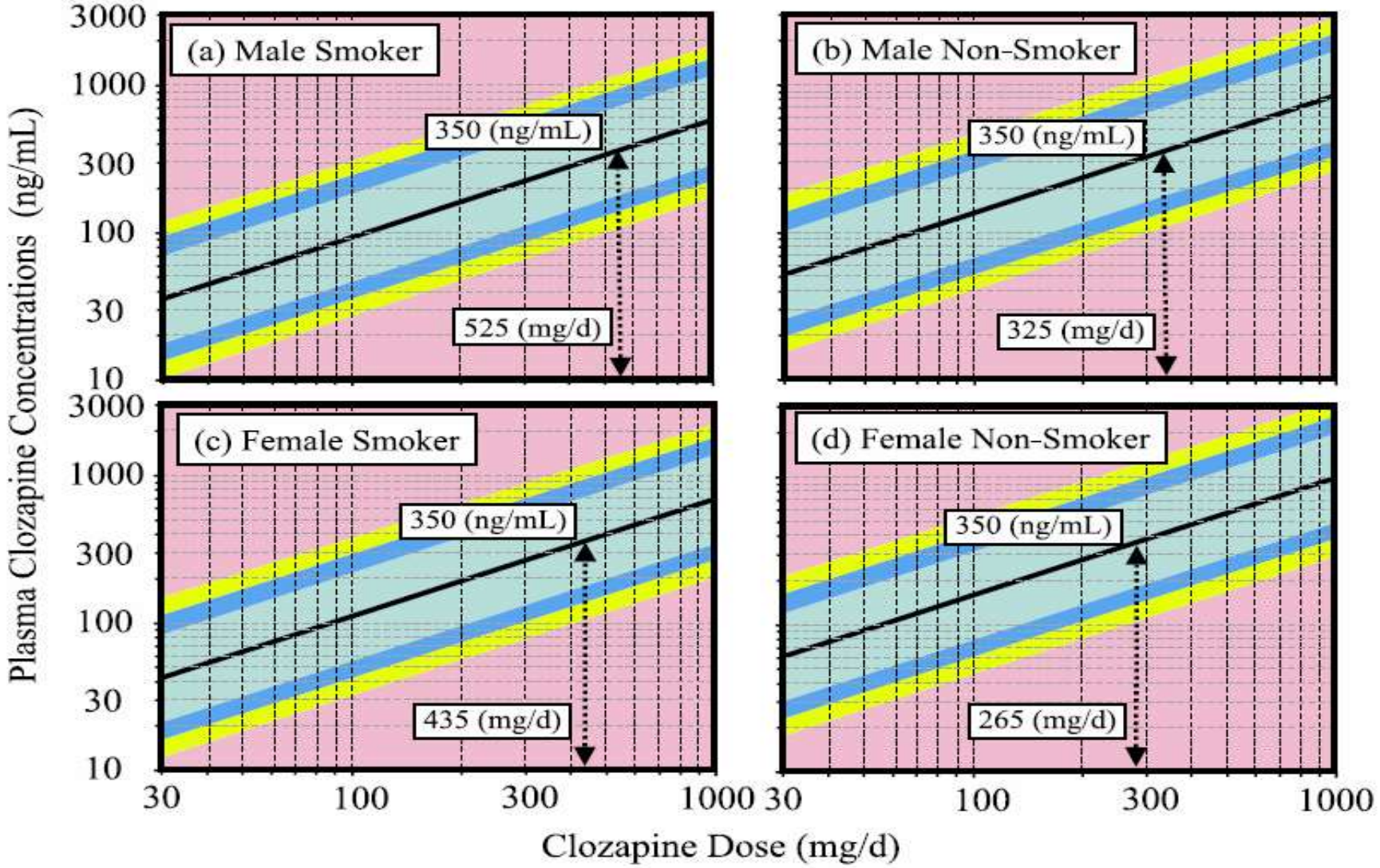
- In Japanese patients with TRS (N=90), delayed initiation of clozapine was negatively correlated with symptomatic improvement.[1]





BPRS=Brief Psychiatric Rating Scale; r_s=Spearman rank-order correlation coefficient.

Yada, et al. *Schizophr Res.* 2015;168(1-2):585-586.



Nomograms showing the likelihood of observed plasma clozapine trough concentration for a given daily dose in a 40 year old patient with an average weight of 80 kg (male) or 70 kg (female) and a clozapine/norclozapine MR of 1.32

Rostami-Hodjegan et al. J Clin Psychopharmacol. 2004;24:70-8

Side effects that definitely warrant discontinuation

- Myocarditis
- Cardiomyopathy
- Agranulocytosis
- Severe thrombocytopenia/thrombocytosis

Side effects that may warrant discontinuation but can usually be managed

- QTc prolongation > 500 milliseconds
- Eosinophilia
- Neutropenia
- Diabetes/Diabetic ketoacidosis
- Neuroleptic malignant syndrome
- Venous thromboembolism
- Hepatic impairment
- Ileus

Side effects that can usually be managed without discontinuation

- Orthostatic hypotension
- Sinus tachycardia
- Leukocytosis
- Metabolic syndrome or its components
- Benign hyperthermia
- Constipation
- Seizures
- Sedation

Managing Treatment Resistant Psychosis

- Are there biological differences between treatment resistant and treatment responsive patients?
- How can clinicians identify these individuals?
- Effectiveness of common approaches to treatment resistance
- Effective use of clozapine
- ***When medications reach their limits***

When medications reach their limits

- **Psychological therapies**
- **Transcranial Magnetic Stimulation for Auditory Hallucinations**
- **ECT for patients on clozapine and other antipsychotics**

Psychological Therapy for TRS

- Cognitive Behavioral Therapy for psychosis (CBTp)
- Psychological Approaches to Auditory Hallucinations
  - Coping Strategy Enhancement
  - CBT for Voices
  - Hallucination-Focused Integrative Therapy (HIT)
  - Mindfulness Training
  - Acceptance and Commitment Therapy (ACT)
  - Competitive Memory Training (COMET)
  - Compassionate Mind Training (CMT)
- Psychological Approaches to Delusions
  - Metacognitive Training for Delusions
  - Feeling Safe Program

Tenets of Cognitive Model of Psychotic Illness

- Psychotic experiences are common—reported by 40% of population
- Problem is how psychotic experiences are interpreted; “normals” correct for odd experiences
- Faulty appraisals leading to diagnosable illness result from specific developmental history
- Faulty appraisals are maintained by logical errors (e.g. generalization, minimization)

National Institute of Mental Health Schizophrenia Patient Outcomes Research Team (NIMH PORT) Recommendation
re: CBT for Schizophrenia

- Recommendation 19. Cognitive Behaviorally Oriented Psychotherapy

Persons with schizophrenia who have residual psychotic symptoms while receiving adequate pharmacotherapy should be offered adjunctive cognitive behaviorally oriented psychotherapy. The key elements of this intervention include a shared understanding of the illness between the patient and therapist, identification of target symptoms, and the development of specific cognitive and behavioral strategies to cope with these symptoms.

Review of the Efficacy of Transcranial Magnetic Stimulation for Auditory Verbal Hallucinations

Christina W. Slotema, Jan D. Blom, Remko van Lutterveld, Hans W. Hoek, and Iris E.C. Sommer

BIOL PSYCHIATRY 2014;76:101–110

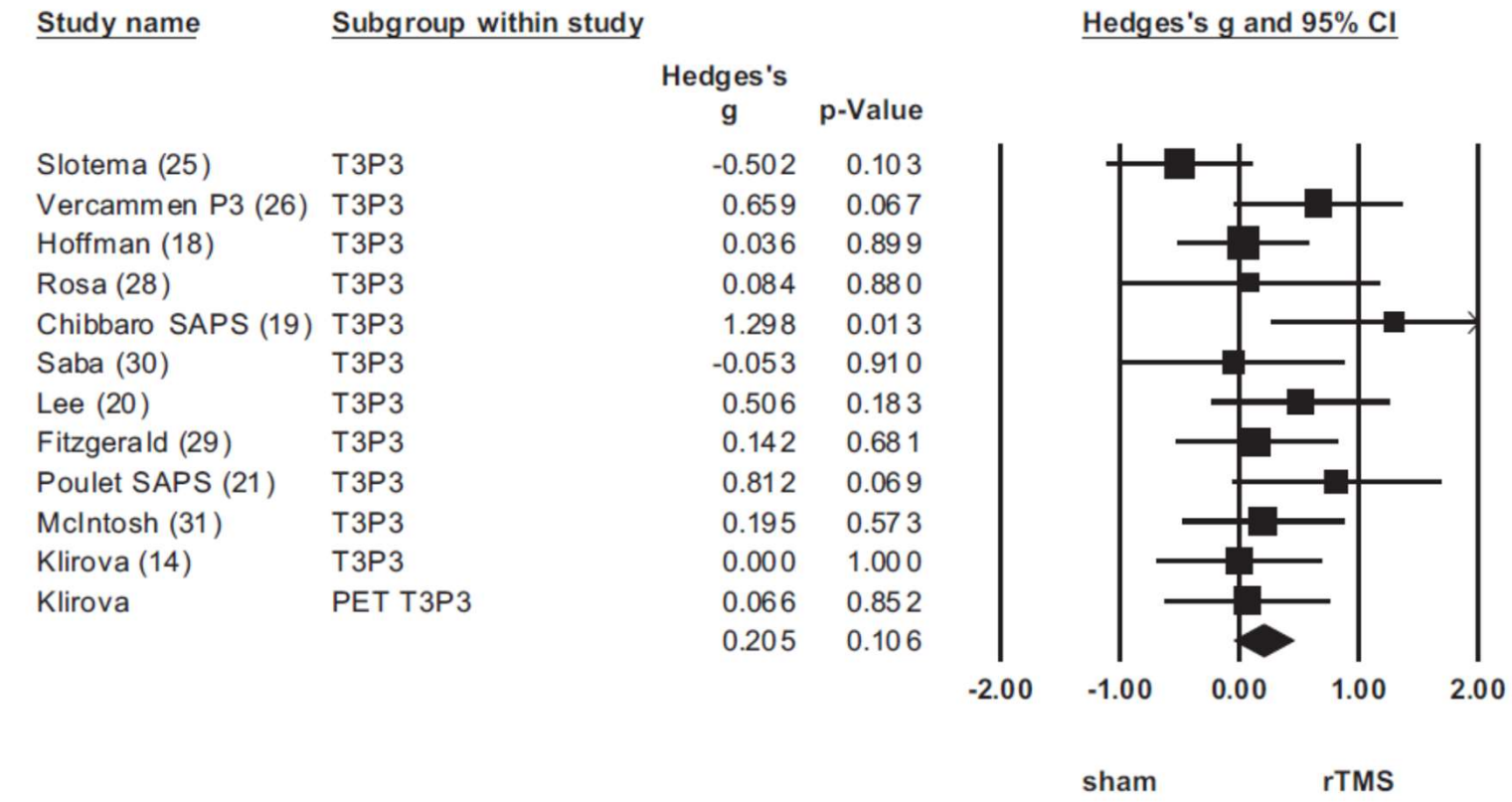
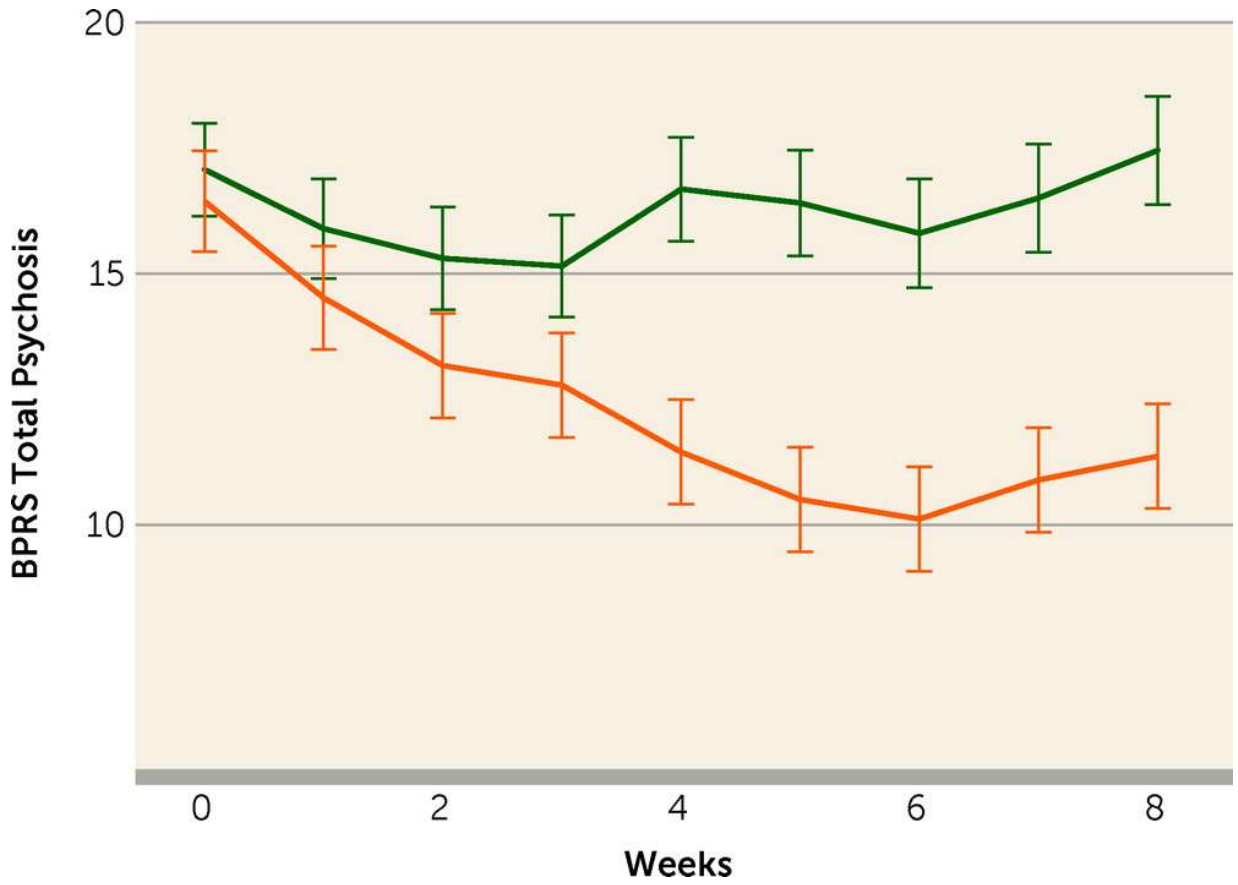


Figure 2. Meta-analysis of repetitive transcranial magnetic stimulation (rTMS) for the severity of psychosis. PET, positron emission tomography; SAPS, Scale for the Assessment of Positive Symptoms; T3P3, left temporoparietal area.

THE AMERICAN JOURNAL OF PSYCHIATRY

From: Electroconvulsive Therapy Augmentation in Clozapine-Resistant Schizophrenia: A Prospective, Randomized Study (Petrides G, et al. *Am J Psychiatry.* 2015;172(1);52-58)



The graph shows the changes in psychosis symptoms in the clozapine group (blue line; phase 1) and the ECT plus clozapine group (red line; phase 1). Treatment-by-time interaction: $F=5.38$, $df=8, 238$, $p<0.0001$. The degrees of freedom for mixed-models analysis were obtained using Satterthwaite's method. Error bars represent standard deviations.

Summary

- Changing to another non-clozapine antipsychotic is seldom effective
- High doses, combining antipsychotics, and adding mood stabilizers are seldom effective
- Delaying clozapine can have long-term consequences
- CBTp and other psychosocial treatments are effective
- ECT has demonstrated effectiveness for partial responses to clozapine and other antipsychotics

UCDAVIS
BEHAVIORAL HEALTH CENTER
OF EXCELLENCE

FIVE MINUTE BREAK

Dismantling Structural Racism in the Diagnoses and Management of Psychotic Disorders

Ruth S. Shim, MD, MPH

DISMANTLING STRUCTURAL RACISM IN THE DIAGNOSES AND MANAGEMENT OF PSYCHOTIC DISORDERS

Ruth S. Shim, MD, MPH
Luke & Grace Kim Professor in Cultural Psychiatry
Professor of Clinical Psychiatry
University of California, Davis

DISCLOSURE/DISCLAIMER

- THIS IS A DIFFICULT AND UNCOMFORTABLE TOPIC
- COMPLEX FEELINGS OFTEN EMERGE, INCLUDING GUILT, ANGER, RESENTMENT, AND DEFENSIVENESS
- YOU MAY PERCEIVE ME OF ACCUSING YOU OF BEING RACIST/SEXIST/ETC.
- YOU MAY FEEL I HAVE A SPECIFIC POLITICAL AGENDA OR THAT I LACK OBJECTIVITY

"I'M NOT INTERESTED
IN ANYBODY'S GUILT.

GUILT IS A LUXURY THAT WE
CAN NO LONGER AFFORD.

I KNOW YOU DIDN'T DO IT, AND I DIDN'T
DO IT EITHER, BUT I AM RESPONSIBLE
FOR IT BECAUSE I AM A MAN AND
A CITIZEN OF THIS COUNTRY AND
YOU ARE RESPONSIBLE FOR IT,
FOR THE VERY SAME REASON."

A CAUTIONARY TALE...

"PRESENTATIONS WHICH ATTEMPT TO DE-CENTER WHITENESS HAVE NO PLACE IN A MEDICAL CONFERENCE. SUCH PRESENTATIONS ARE BETTER GIVEN TO THE NEO-MARXIST WHITEY HATERS FOUND IN UNIVERSITY DECONSTRUCTIONIST COURSES HEAVILY POPULATED BY ANGRY WOMEN AND DISSENT MINORITIES."

TALKING ABOUT STRUCTURAL RACISM IN MEDICINE

- **WE HAVE BEEN SOCIALIZED TO BELIEVE THAT IT IS NOT POLITE TO TALK ABOUT RACE**

  This begins early, as children in the US (and elsewhere)

- **PHYSICIANS HAVE NOT BEEN TAUGHT ABOUT THE CONNECTION BETWEEN RACISM AND HEALTH**

  Medical school has a long tradition of teaching biological determinism

- **ARE THE TIMES A-CHANGIN'?**

  Some feel that there is an overemphasis and over-correction happening now

HEALTH DISPARITIES:

DIFFERENCES IN HEALTH STATUS AMONG DISTINCT SEGMENTS OF THE POPULATION INCLUDING DIFFERENCES THAT OCCUR BY GENDER, RACE OR ETHNICITY, EDUCATION OR INCOME, DISABILITY, OR LIVING IN VARIOUS GEOGRAPHIC LOCALITIES

HEALTH INEQUITIES:

DISPARITIES IN HEALTH THAT ARE A RESULT OF SYSTEMIC, AVOIDABLE, AND UNJUST SOCIAL AND ECONOMIC POLICIES AND PRACTICES THAT CREATE BARRIERS TO OPPORTUNITY


Adverse Mental Health Outcomes
Reduced Options, "Poor Choices"
Behavioral Risk Factors
Physiologic Stress Responses
Psychological Stress
Homelessness, Housing Instability
Food Insecurity
Transportation Insecurity
Poor Access to Healthcare
Adverse Features of the Built Environment
Neighborhood Disorder
Pollution Exposure
Climate Change
Adverse Early Life Experiences
Discrimination
Exposure to Violence, Conflict
Interaction with the Criminal Justice System
Low Education
Unemployment, Underemployment
Poverty, Income Inequality
Area-Level Poverty
Unfair and Unjust Distribution of Opportunity
Public Policies
Social Norms

"AFRICAN AMERICANS HAVE HIGHER INCARCERATION RATES, HIGHER UNEMPLOYMENT, LOWER INCOMES, LOWER HOME AND BUSINESS OWNERSHIP, LESS EDUCATION, LESS HEALTHCARE, MORE DISEASE, AND LOWER LIFE EXPECTANCY THAN WHITES.

IF YOU BELIEVE BLACKS ARE NATURALLY DUMB, SICK, CRIMINAL, YOU HAVE YOUR ANSWER FOR THESE DISCREPANCIES.

IF, HOWEVER, YOU RESIST USING STEREOTYPES TO MAKE SENSE OF YOUR WORLD, INSTITUTIONAL RACISM PROVIDES A VERY PRACTICAL (AND VERY TRACEABLE) EXPLANATION FOR THE INFERIOR SOCIETAL POSITION OF AFRICAN AMERICANS."

Greer BW: Coming to Grips with Racism. The Spoke. The Albright Institute. April 2017.

THE PROBLEM WITH RACE-BASED CLINICAL CARE

- RACE IS A SOCIAL CONSTRUCT
- RACE IS A ROUGH AND IMPRECISE PROXY FOR CULTURE, GENETICS, AND SOCIOECONOMIC STATUS
- RACE CANNOT BE ACCURATELY BIOLOGICALLY CATEGORIZED
- YET, WE USE RACE TO CONFIRM ASSUMPTIONS/PREJUDICES/BIASES ABOUT OUR PATIENTS

STRUCTURAL RACISM

A SYSTEM IN WHICH PUBLIC POLICIES, INSTITUTIONAL PRACTICES, CULTURAL REPRESENTATIONS, AND OTHER NORMS WORK IN VARIOUS, OFTEN REINFORCING WAYS TO PERPETUATE RACIAL GROUP INEQUITY.

https://www.aspeninstitute.org/blog-posts/structural-racism-definition/

STRUCTURAL RACISM

STRUCTURAL RACISM **IS NOT SOMETHING THAT A FEW PEOPLE OR INSTITUTIONS CHOOSE TO PRACTICE.** INSTEAD, IT HAS BEEN A FEATURE OF THE SOCIAL, ECONOMIC, AND POLITICAL SYSTEMS IN WHICH WE ALL EXIST

STRUCTURAL MECHANISMS **DO NOT REQUIRE THE ACTIONS OR INTENTIONS** OF OTHERS

https://www.aspeninstitute.org/blog-posts/structural-racism-definition/

EVEN IF INTERPERSONAL DISCRIMINATION WAS ELIMINATED TODAY,

RACIAL AND ETHNIC INEQUITIES WOULD REMAIN DUE TO PERSISTENCE OF STRUCTURAL RACISM

COMMON ERRORS IN PSYCHIATRIC CARE

- **ESSENTIALISM**

  The belief that there are distinct, unchanging, and natural characteristics that define social groups and facilitate their categorization

- **POSITIONALITY/ INVISIBILITY**

  Failure to see, examine, or question the unnamed norm

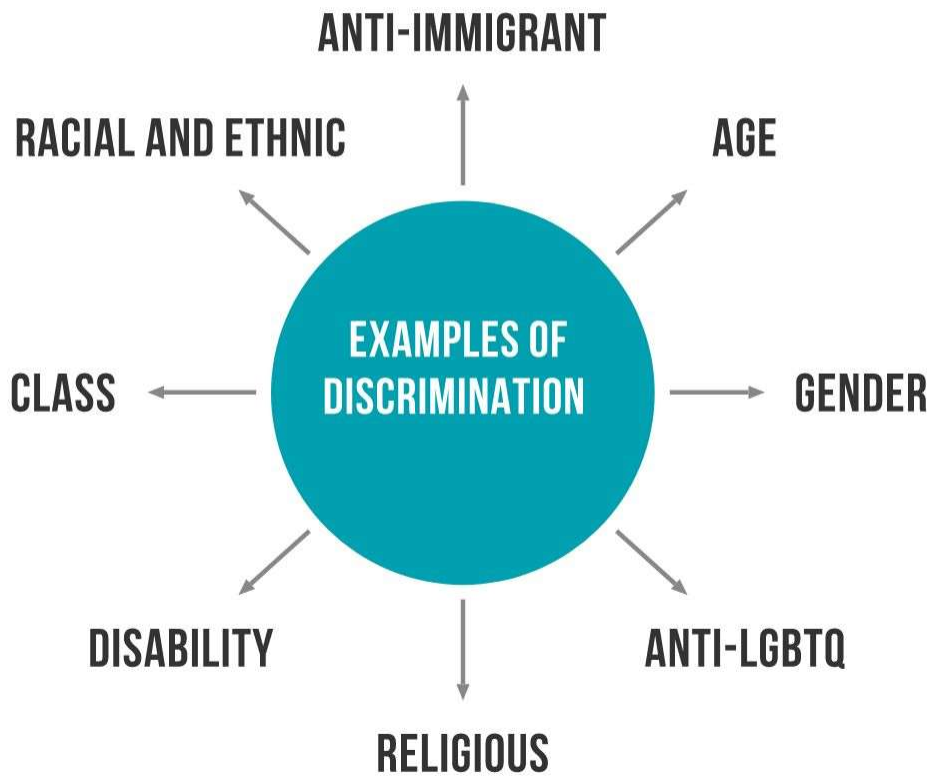
- **ERASURE OF CONTEXT**

  Failure to consider sociohistorical context when seeking to understand the etiology of inequities

- **BIOLOGICAL DETERMINISM**

  The false belief that racial groups are biologically and genetically different

GROUPS COMMONLY DISCRIMINATED AGAINST IN THE US



TYPES OF DISCRIMINATION

LEGAL

ILLEGAL

OVERT

COVERT

INTERPERSONAL

(Individual)

INSTITUTIONAL

(Organizational)

STRUCTURAL

(Systemic)

Persistence of racial disparities in prescription of first-generation antipsychotics in the USA

Thomas B. Cook[1]*, Gloria M. Reeves[2], James Teufel[1] and Teodor T. Postolache[2,3,4]

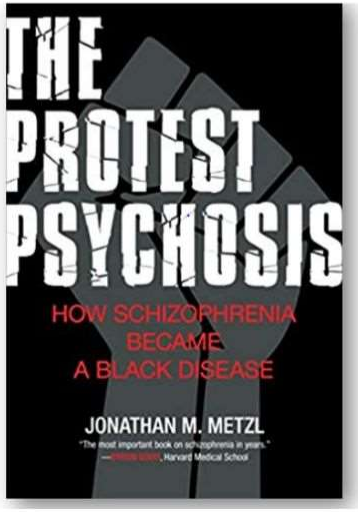
[1] *Department of Public Health, Mercyhurst Institute of Public Health, Mercyhurst University, Erie, PA, USA*
[2] *Department of Psychiatry, University of Maryland School of Medicine, Baltimore, MD, USA*
[3] *Veterans Integrated Service Network (VISN) 5, Mental Illness Research Education and Clinical Center (MIRECC), Baltimore, MD, USA*
[4] *Rocky Mountain MIRECC, Denver, CO, USA*

ABSTRACT

Purpose The aim of this study was to estimate the prevalence of first-generation antipsychotics (FGA) prescribed for treatment of psychiatric and neurological conditions and use of benztropine to reduce extrapyramidal side effects (EPS) by patient race/ethnicity in a nationally representative sample of adult outpatient visits.

Methods The study sample included all outpatient visits ($N = 8154$) among patients aged 18–69 years where a prescription for one or more antipsychotics was recorded across 6 years of the National Ambulatory Medical Care Survey and National Hospital Ambulatory Medical Care Survey (2005–2010). Use of FGA was compared by race/ethnicity using multiple logistic regression models accounting for patient and clinical characteristics stratified by neighborhood poverty rate. Frequency of EPS was determined by use of benztropine to reduce or prevent EPS.

Results Black patients were significantly more likely than White patients to use FGA (odds ratio = 1.48, $p = 0.040$) accounting for psychiatric and neurological diagnoses, treatment setting, metabolic factors, neighborhood poverty, and payer source. Black patients were more than twice as likely as White patients to receive higher-potency FGA (haloperidol or fluphenazine), particularly in higher-poverty areas (odds ratio = 2.50, $p < 0.001$). Use of FGA, higher among Black than White patients, was positively associated with use of benztropine to reduce EPS.



CULTURAL COMPETENCE

THE ABILITY TO INTERACT EFFECTIVELY WITH PEOPLE OF DIFFERENT CULTURES, ENSURING THE NEEDS OF ALL COMMUNITY MEMBERS ARE ADDRESSED

https://www.samhsa.gov/capt/applying-strategic-prevention/cultural-competence

CULTURAL HUMILITY

- COMMIT TO A LIFELONG PROCESS OF SELF-EVALUATION AND SELF-CRITIQUE
- DESIRE TO FIX POWER IMBALANCES BETWEEN PROVIDERS AND CLIENTS
- DEVELOP COMMUNITY PARTNERSHIPS TO ADVOCATE WITHIN THE LARGER ORGANIZATIONS IN WHICH WE PARTICIPATE

Tervalon, M., & Murray-Garcia, J. (1998). Cultural humility versus cultural competence: A critical distinction in defining physician training outcomes in multicultural education. Journal of Health Care for the Poor and Undeserved, 9, 117-125.

STRUCTURAL COMPETENCE

"THE TRAINED ABILITY TO DISCERN HOW A HOST OF ISSUES DEFINED CLINICALLY AS SYMPTOMS, ATTITUDES, OR DISEASES (E.G., DEPRESSION, HYPERTENSION, OBESITY, SMOKING, MEDICATION "NON-COMPLIANCE," TRAUMA, PSYCHOSIS) ALSO REPRESENT THE DOWNSTREAM IMPLICATIONS OF A NUMBER OF UPSTREAM DECISIONS ABOUT SUCH MATTERS AS HEALTH CARE AND FOOD DELIVERY SYSTEMS, ZONING LAWS, URBAN AND RURAL INFRASTRUCTURES, MEDICALIZATION, OR EVEN ABOUT THE VERY DEFINITIONS OF ILLNESS AND HEALTH."

Metzl JM, Hansen H. Structural competency: theorizing a new medical engagement with stigma and inequality. Soc Sci Med. 2014;103:126–133. doi:10.1016/j.socscimed.2013.06.032

CASE EXAMPLE

MR. GORDON IS A 45-YEAR-OLD OBESE AFRICAN AMERICAN MALE WITH HYPERTENSION WHO COMES TO PRIMARY CARE APPOINTMENT LATE AND REPORTS NOT HAVING MADE ANY OF THE DIETARY CHANGES (REDUCED SALT AND FAT INTAKE) RECOMMENDED AT LAST VISIT

CULTURAL FORMULATION

- HIGH FAT, HIGH SALT DIET IS PART OF AFRICAN AMERICAN CULTURE AND SO IS VERY HARD TO GIVE UP
- AFRICAN AMERICANS HAVE A MORE FLUID SENSE OF TIME BOUNDARIES AND SO COMING LATE IS CULTURALLY NORMATIVE

STRUCTURAL FORMULATION

- MR. GORDON HAS A LIMITED INCOME AND LIVES IN A FOOD DESERT, WHERE ACCESS TO FRESH FOOD IS LIMITED – HE BUYS MOST OF HIS FOOD AT A CORNER STORE THAT SELLS HIGHLY PROCESSED FOOD THAT IS LOWER IN COST AND HIGH IN SALT AND FAT
- MR. GORDON MUST TAKE THREE BUSES FROM HIS HOME TO GET TO THE APPOINTMENT AND THE BUS SERVICE IS UNRELIABLE

Thank your for joining us!

Survey

- Your browser will automatically be redirected to the survey, we thank you for participation

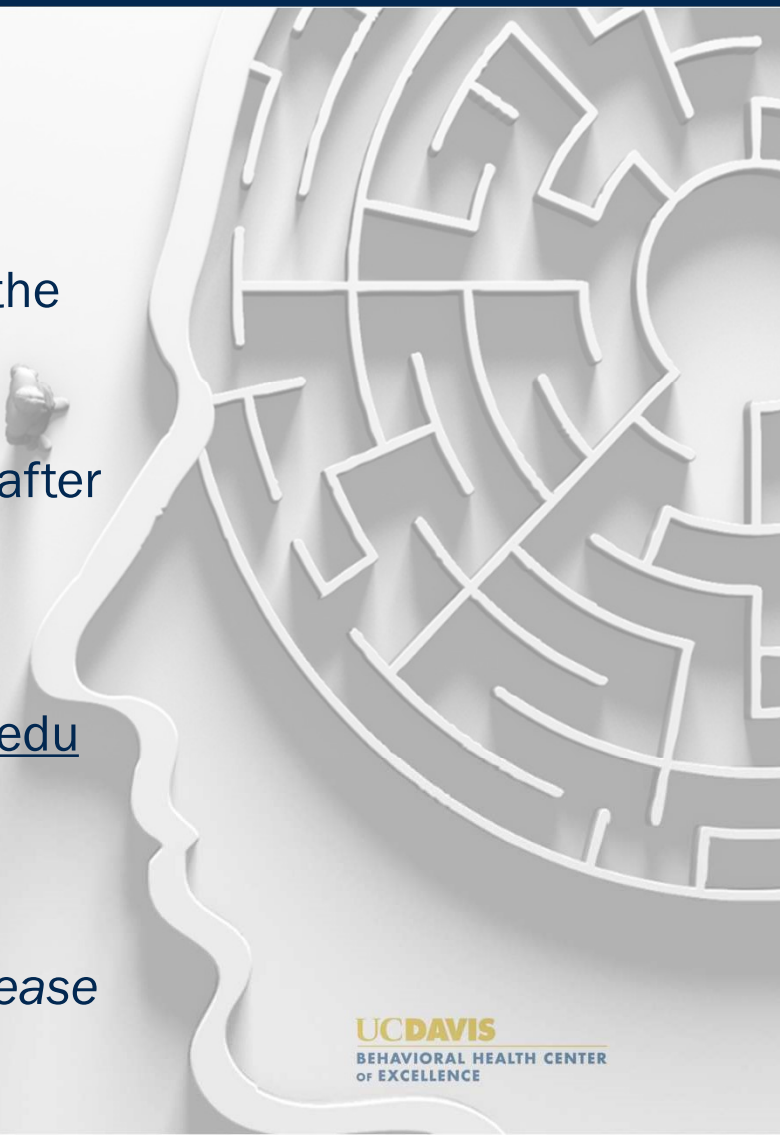
- The link to the survey will also be sent via email after the presentation

Conference Questions and Comments

- Please email Brooke Herevia: bherevia@ucdavis.edu

CME Information

- Please email cmereg@ucdavis.edu
- *If you were unable to register for CME Credits, please email Brooke Herevia*



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