**Editors:**

Mohsina Ahmed, MD  
Rajesh Tampi, MD, MS, DFAPA

*Metro Health Psychiatry Residency  
Evidence Based Mental Health Journal* is a joint resident and faculty led monthly research journal, which aims to enhance our access to new research articles published in all subspecialties of psychiatry. We hope to encourage scholarship and participation to enhance our knowledge of the leading research in our field.

**Subspecialties Included**

- Academic Psychiatry  
- Addiction Psychiatry  
- Child & Adolescent Psychiatry  
- Forensic Psychiatry  
- Geriatric Psychiatry  
- Neuropsychiatry  
- Psychosomatic Medicine  
- Hospice and Palliative Medicine

**Journals Included**

- *American Journal of Psychiatry*  
- *American Journal of Geriatric Psychiatry*  
- *Academic Psychiatry*  
- *Current Psychiatry*  
- *Psychosomatics*  
- *Journal of the American Academy of Child & Adolescent Psychiatry*  
- *JAMA Psychiatry*  
- *New England Journal of Medicine*

**Contact:**

Mohsina Ahmed, MD  
mahmed@metrohealth.org;  
Mohsina.ahmed@gmail.com  

Rajesh Tampi, MD  
rampi@metrohealth.org  
rajesh.tampi@gmail.com
CLASSICS IN PSYCHIATRY

Suneela Cherlopalle, MD


Objectives: The Investigators wanted to compare the effectiveness of atypical and conventional antipsychotic drugs. The Atypical antipsychotics used are Olanzapine, quetiapine and Ziprasidone and the typical antipsychotics are risperidone & perphenazine.

Methods: The CATIE trial phase 1 was conducted between the January 2001 and December 2004, which included a total of 1493 patients with Schizophrenia recruited at 57 U.S. sites. These patients were randomly assigned to receive olanzapine, perphenazine, quetiapine, or risperidone under double blind conditions for up to 18 months. Ziprasidone was included after its approval by the Food and Drug Administration in 2002. The primary aim was to delineate differences in the overall effectiveness of these five treatments. Patient’s between the ages 18-65 years of age, with diagnosis of schizophrenia as per DSM IV, and who were able to take oral antipsychotic medication was included in the study.

The primary outcome measure was the discontinuation of treatment for any cause and the secondary outcome measure was to find the specific reasons for the discontinuation of treatment. Investigators used Kaplan–Meier survival curves to estimate the time to the discontinuation of treatment. Treatment groups were compared with use of Cox proportional-hazards regression models stratified according to site. PANNS score (ranging from 30-210) and CGI (3-7) score indicated the severity of illness.

Successful treatment time was defined as the number of months of treatment during phase 1 in which patients had a CGI Scale score of at least 3 (mildly ill) or a score of 4 (moderately ill) with an improvement of at least two points from baseline.

Results: Overall, 74 percent of patients discontinued the study medication before 18 months (1061 of the 1432 patients who received at least one dose): 64 percent of those assigned to olanzapine discontinued the treatment when compared to 74 % assigned to risperidone, 75 % assigned to perphenazine, 79 % assigned to ziprasidone, 82 percent assigned to quetiapine. The time to the discontinuation of treatment for any cause was significantly longer in the olanzapine group than in the quetiapine. Additionally, Olanzapine was associated with more discontinuations for weight gain or metabolic effects, and perphenazine was associated with more discontinuation for extrapyramidal effects.

Conclusions: The authors concluded that the efficacy of the conventional antipsychotic perphenazine appeared similar to that of the atypical antipsychotics. While Olanzapine caused fewer hospitalizations and lower rates of insomnia, it caused exceptional weight gain and the highest rate of discontinuations were due to side effects (metabolic).

Punchline: This study concludes that to the extent that antipsychotics differ, it is more in their side effects than therapeutic effects.

PSYCHOSOMATIC MEDICINE

Mohsina Ahmed, MD


Objectives: To provide clinicians with the most up-to-date summary on management of substance use disorders in pregnant women with the intent to engage patients and prevent continued abuse and addiction across generations.

Methods: Authors summarize their discussion from a workshop on substance abuse in pregnancy which was presented by the Members of the Women’s Mental Health Special Interest Group of the Academy of Psychosomatic Medicine in November 2013. This workshop examined the latest literature on epidemiology, maternal and fetal risks, screening and treatment considerations for tobacco, alcohol, cannabis, opioids, benzodiazepines, cocaine, amphetamines, 3,4 Methylendioxyamphetamine, lysergic acid diethylamide, and dextromethorphan use in pregnancy.
Results:

Screening/Treatment Interventions:

**Tobacco:** Screening, smoking cessation counseling, counseling, health education, CBT, incentive-based interventions, social support. Few studies showing nicotine replacement therapy (gums) superior to no pharmacotherapy. Bupropion (some data shows efficacy). Varenicline is not studied and not recommended. Medications rarely recommended. Strongly encourage smoking cessation in breastfeeding women.

**Alcohol:** Cautious and limited use during lactation (American Academy of Pediatrics). Physician-delivered counseling visits, advice, education, brief motivational interview intervention, motivational interviewing. Careful screening using T-ACE questionnaire, comprehensive psychoeducation, counsel alcohol cessation, monitor alcohol metabolite biomarkers (ethyl glucuronide, fatty acid ethyl esters).

**Cannabis:** Screening and counsel on risks. Counsel cessation, refer to substance abuse treatment programs. Educate about safe sleeping. Avoid breast feeding (American Academy of Pediatrics).

**Benzodiazepines:** Limited data. Refer to substance abuse treatment programs, motivational approaches, 12-step programming, manage comorbid psychiatric conditions, safety detoxify in an inpatient setting. Minimize exposure to fetus.

**Cocaine:** Immediate discontinuation. Referral to substance abuse treatment program.

**Amphetamines:** Immediate discontinuation. Referral to substance abuse treatment program. CBT, family education, 12-step program, drug testing. Monitor for discontinuation signs/symptoms (fatigue, anergia, depression, paranoia). For Mild/Moderate ADHD patients: wean off, substitute agents (bupropion), nonpharmacologic treatments. For reliable Moderate/Severe ADHD patient: continue on table dose of stimulant, educate on known risks and limits of current data.

**Opioids:** Opioid agonist (Methadone) therapy is first line. Buprenorphine is more recently used. Both are clinically safe. Neither is FDA approved. Maintenance therapy, psychosocial interventions. Assessment and management of NAS and breast feeding.

3.4 **Methylenedioxymethamphetamine:** Referral to treatment programs and psychosocial interventions.

**Lysergic acid diethylamide:** Referral to treatment programs and psychosocial interventions.

**Dextromethorphan:** Avoid use. Referral to treatment programs and psychosocial interventions.

Conclusions: Screening for substance use is strongly recommended in pregnant women. However, negative legal consequences, mandatory reporting laws present a barrier. Other challenges and barriers to seeking treatment include stigma, financial difficulties, poor social supports, lack of access to care, and domestic violence. Psychiatrists must work in collaboration with women’s health providers to engage and provide evidence-based interventions to these patients.

**Punchline:** Substance abuse is prevalent among women of reproductive age and among pregnant and lactating mothers so careful screening, psychoeducation and comprehensive treatment interventions are required to engage and manage this population.

---

**GERIATRIC PSYCHIATRY**

Rajesh Tampi, MD


Objectives: The investigators used data from a national survey to assess differences among different ages groups: young (ages 20–34), middle-aged (ages 35–64) and older (ages ≥65) adults with respect to past-year prevalence, nature of “worst” stressful experience ever experienced before the onset of PTSD, all traumatic experiences, symptom expression, psychiatric comorbidities and mental health–related quality of life in individuals with PTSD.

Methods: The investigators analyzed data from Wave 2 of the National Epidemiological Survey on Alcohol and
Related Conditions (NESARC) that was conducted by the U.S. National Institute on Alcohol Abuse and Alcoholism. The data for Wave 2 of the NESARC was collected between 2004 and 2005 and is a longitudinal follow-up to the Wave 1 that collected data between 2001 and 2002. The investigators chose to analyze data from Wave 2 as Wave 1 did not assess PTSD or borderline, schizotypal or narcissistic personality disorders. They limited their analyses to adults who met the past-year PTSD diagnostic criteria (N = 1,715). The NESARC used the Alcohol Use Disorders and Associated Disabilities Interview Schedule IV which is designed for lay interviewers to assess psychiatric disorders based on the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV).

**Results:** The investigators found that the prevalence of past-year PTSD among older adults was 2.6% when compared to 4.3% and 5.2% respectively among young and middle-aged adults. They also found that older adults experienced significantly fewer traumatic experiences (mean: 5.2) when compared with young (mean: 5.7) and middle-aged adults (mean: 6.4). But compared to young adults, older adults were more likely to report their own serious or life-threatening accident or illness as a traumatic experience. Additionally, older adults were approximately eight times more likely than young adults and four times more likely than middle-aged adults to report combat-related traumatic experiences. Compared to older adults, young and middle-aged adults had significantly greater symptom counts and greater odds of comorbid psychiatric disorders including Cluster A and B personality disorders, any past-year mood and substance use disorders. However, the investigators found that PTSD had similar effects on mental health-related quality of life across the three groups.

**Conclusions:** The investigators concluded that greater age is associated with lower overall severity, lower prevalence rates, fewer traumatic experiences, lower symptom counts and lower odds of psychiatric comorbidity among individuals with PTSD.

**Punchline:** This evaluation of the National Epidemiologic Survey on Alcohol and Related Conditions data indicates that PTSD is less prevalent and has overall lower severity among older adults when compared to younger adults, but older adults are significantly more likely than younger adults to report combat-related traumatic experiences.

---

**Rajesh Tampi, MD**


**Objectives:** The investigators wanted to study the incidence and predictors of depressive and anxiety disorders in spousal caregivers of individuals with dementia.

**Methods:** The data for this study came from dyads of 192 family caregivers and their relatives with dementia living at home and collected during 24 month period. At baseline, none of the 192 caregivers had a clinically significant depressive or anxiety disorder as measured with the Mini International Neuropsychiatric Interview (MINI). The primary outcome was the onset of a new episode of major depression and/or anxiety disorder in the caregiver during the 24 month follow-up period. The investigators assessed the incidence of depression and anxiety disorders at baseline and every three months after enrolment using the MINI. The caregivers were evaluated using the Center for Epidemiologic Studies Depression [CES-D] for sub-threshold depressive symptoms and Hospital Anxiety and Depression Scale-A [HADS-A] for sub-threshold anxious symptoms.

**Results:** Approximately 60% of the caregivers developed a depressive and/or anxiety disorder during the 24 month follow-up period with 32.0% of the caregivers developing both disorders. A total of 37.0% of the caregivers developed only depression whereas approximately 55% of the caregivers developed anxiety without depression. Generalized anxiety disorder was the most common anxiety disorder with a frequency of 41.4%, followed by agoraphobia (37.6%), panic disorders (24.3%) and social phobia (19.3%). Incident depression and anxiety disorders were more common in women (63.5%) than in men (50.9%). Among women and men anxiety disorders were more common that depressive disorders; 57.1% of the women developed anxiety disorders and 42.1% developed depression. Among men 49.1% developed an anxiety disorders and 25.5% developed depression. The investigators found that the presence of sub-threshold depression and health problems were significantly associated with incident disorders. Among the two, sub-threshold depressive symptoms were the best predictor of
an incident disorder with ≥ 82% of the caregivers with sub-threshold depressive symptoms developing an incident disorder.

Conclusions: The investigators concluded that spousal caregivers of individuals with dementia have high risk of developing depressive or anxiety disorders. Additionally, factors associated with the caregiver’s mental health are more predictive of development of depressive and anxiety disorders than environmental stressors.

Punchline: This prospective cohort study indicates that spouses who are caregivers for individuals with dementia have a high risk of developing depressive and anxiety disorders with the presence of baseline sub-threshold depressive symptoms and poor self-reported health being predictors for the development of depression and anxiety.

Rajesh Tampi, MD


Objective: The investigators wanted to assess whether Problem Solving Therapy (PST) is more effective than Supportive Therapy (ST) in reducing suicidal ideation in older adults with major depression and executive dysfunction.

Methods: The participants in this study were ≥60 years in age, had a diagnosis of major depression without psychotic features on the Structured Clinical Interview for Axis I DSM-IV Disorders (SCID-R/DSM-IV), had a score of ≥ 20 on the 24-item Hamilton Depression Rating Scale (HDRS), had a score of ≥ 24 on the Mini-Mental State Examination (MMSE), had a score of ≤33 on the Mattis Dementia Rating Scale initiation/preservation domain (DRS-IP) and a Stroop Color-Word Test score of ≤25. Participants were assigned to receive either PST or ST using random numbers in blocks of five participants. The participants had a total of four research interviews: an eligibility interview, a baseline assessment and 12-week and 36-week post-randomization interviews. The primary outcome for this study was the suicide item on the HDRS which was collected at all assessment time points.

Results: A total of 221 individuals were randomized to receive either PST (N = 110) or ST (N = 111).

Approximately 65.5% of the participants were female. The mean age of the participants was 73.0 years and the mean-years of education was 15.3 years.

A total of 61% of the participants reported suicidal thoughts at the baseline. After 12 weeks the PST group had a higher rate of improvement on the suicide ideation when compared to the ST group (60.4% versus 44.6%). The adjusted odds for improvement in the ST group was half that of the PST group (odds ratio [OR]: 0.50). After 36 weeks the treatment effects continued to favor PST when compared to ST (OR: 0.50).

After 12 weeks, those participants who were single were found to be less likely to show improvement on suicidal ideation (OR: 2.5), whereas those who were disabled were more likely to show improvement (OR: 1.05). After 36 weeks, those participants who were younger were less likely to be suicidal (OR: 0.57).

Conclusions: The investigators concluded that PST is more effective than ST in reducing suicidal ideation in older adults with major depression and executive dysfunction.

Punchline: This randomized controlled trial adds further proof that PST is an effective treatment for depression in older adults and can reduce suicidal ideation in these individuals. PST may also be more effective than ST in older individuals with depression who have executive dysfunction and suicidal ideation.