

PS1-37:

Comparison of Antipsychotic Polypharmacy Trends among Schizophrenia Patients across Multiple Healthcare Systems

John Zeber¹; Fangfang Sun¹; Eileen Stock¹; Laurel Copeland²; Brian Ahmedani²; Sandra Morissette³

¹Scott & White Healthcare; ²Henry Ford Health System; ³Central Texas Veterans Health Care System

Background/Aims: Although a number of international guidelines recommend antipsychotic monotherapy in patients with schizophrenia, frequently the complex pharmacological treatment for these individuals involves multiple medications. To investigate prescribing patterns for patients with schizophrenia, this study examined antipsychotic polypharmacy across multiple outpatient healthcare settings (including two HMORN sites) and their association with hospital admission. **Methods:** This multi-system study utilized data on patients diagnosed with schizophrenia, including 119,662 Veterans in the Department of Veterans Affairs (VA) healthcare system, 553 and 4,887 patients in two private, integrated health systems (HMORN), and outpatients (17,596,617 visits in 1-week look-back) from a nationally representative sample of U.S. residents seeking care outside federal systems (National Ambulatory Medical Care Survey, NAMCS). Antipsychotic polypharmacy was defined as use of more than one antipsychotic drug (first or second generation) during the covered period (week, year). The prevalence and trend of antipsychotic polypharmacy was assessed in each system (2002-2009 or 2005-2009) and their association with one-year hospital admission using multivariable logistic regression. **Results:** Annual antipsychotic treatment in the VA ranged between 74-78% each year, with the lowest rates observed in the HMORN systems (49-67% site 1, 22-41% site 2) per pharmacy fill data; NAMCS ranged between 69-84% per clinician-reported prescriptions. Polypharmacy rates depended on the defined covered period. The VA had lower polypharmacy when data were restricted to the one-week covered period used in non-federal systems (20-22% vs. 19-31% NAMCS). In each system, polypharmacy was associated with increased odds of admission (odds ratio ranging 1.4-2.4). **Conclusions:** The unadjusted longitudinal trends suggest tremendous system variations in antipsychotic use in patients with schizophrenia. Cross-system comparisons are inherently subject to uncertainty due to variation in the amount and type of data collected (e.g., look-back period, pharmacy records versus clinician chart review), yet represent a significant effort to understand organizational differences and context. Given current debates over healthcare access and treatment costs, electronic systems to signal polypharmacy could assist in identifying patients requiring more complex clinical and pharmacy management, individuals at substantially higher risk for adverse events. Such enhanced sentinel detection and follow-up care could ultimately lead to improved clinical practice and fiscal well-being.

Keywords: Schizophrenia; Antipsychotics

doi:10.3121/cmr.2014.1250.ps1-37

PS2-43:

Internet Delivered Mindfulness-based Cognitive Therapy for Reducing Residual Depressive Symptoms: An Open Trial and Quasi-experimental Comparison to Propensity Matched Controls

Arne Beck¹; Sona Dimidjian²; Jennifer Boggs¹; Jennifer Felder²; Zindel Segal³

¹Kaiser Permanente Colorado; ²University of Colorado Boulder; ³University of Toronto

Background/Aims: The persistence of residual depressive symptoms (RDS) among patients in clinical remission predicts a negative prognosis and is considered an important target for adjunctive treatment. Mindfulness-Based Cognitive Therapy (MBCT) is effective in reducing RDS. Delivered in 8 in-person group sessions, MBCT teaches disengagement from depression-related ruminative thought patterns to reduce RDS and vulnerability to relapse. However, MBCT faces barriers to dissemination including service costs and access. We developed an 8 session web-based version of MBCT (Mindful Mood Balance, or MMB), incorporating experiential practice, video-based vicarious learning, and didactic information that replicate core components of in-person MBCT. **Methods:** Recurrently depressed patients

(N = 100, with a PHQ-9 score ≤ 12) were recruited from primary care and behavioral health clinics at Kaiser Permanente Colorado to participate in the MMB program. The primary outcome measure was change in PHQ-9 scores over the 8 week program for the full sample of patients and for the RDS subsample (N = 42) at elevated risk for recurrence based on initial PHQ-9 scores ranging from 5 to 12. In addition, we compared 8 week changes in PHQ-9 scores for MMB participants to a sample of propensity matched case-control patients (N = 100) who received treatment as usual for depression, including psychotherapy and/or antidepressants. **Results:** Significant reductions in depressive symptoms at 8 weeks were observed for the full sample and RDS subsample of MMB participants ($t = -2.83, P = 0.007$; and $t = -3.54, P = 0.003$, corresponding to effect sizes of $d = .57$ and $d = 1.09$, respectively). The average difference in the change from pre to post for MMB participants compared to propensity matched controls was 3.57 (se = 0.65, $t = 5.52, P < 0.0001$, effect size $d = 0.78$). Within the RDS subgroup, propensity matched controls showed no significant change in PHQ-9 scores (0.76 (sd = 5.76), $t = 0.86, P = 0.40$), whereas MMB participants had an average decrease of 1.98 (sd = 2.57, $t = -4.99, pP < 0.0001$), corresponding to an effect size of $d = 1.54$. **Conclusions:** Findings from this first study of an online MBCT program for management of RDS support the clinical benefits of this approach. Further controlled trials are required to establish its effectiveness as an adjunctive treatment for managing unipolar mood disorders.

Keywords: Mindfulness based cognitive therapy; Online depression treatment

doi:10.3121/cmr.2014.1250.ps2-43

PS2-44:

Qualitative Patient Experiences with the Mindful Mood Balance Program – A Web-based Intervention for Depressive Relapse Prevention

Jennifer Boggs¹; Arne Beck¹; Jennifer Felder²; Sona Dimidjian²; Zindel Segal³

¹Kaiser Permanente Colorado; ²University of Colorado Boulder; ³University of Toronto

Background/Aims: Mindfulness-based cognitive therapy (MBCT) is an empirically supported intervention designed to teach emotion regulation skills for reducing residual depressive symptoms and avoiding relapse triggers that contribute to chronic illness course. MBCT faces common challenges to dissemination, including: service costs, waiting lists, and access. Online treatments address these challenges by increasing treatment accessibility and flexibility, but present other challenges of high dropout rates and decreased engagement. The present study is the first qualitative investigation of patients' experiences with Mindful Mood Balance (MMB), an 8 week online treatment that features the core elements of in-person MBCT. **Methods:** Conducted qualitative content analysis on 38 exit interviews with adult patients who participated in MMB. Interviews gathered constructive feedback on website activities and content, program administration, as well as on skills learned and personal insights achieved through participation. Participation required current PHQ-9 score less than or equal to 12 and lifetime history of one or more major depressive episodes. **Results:** Participants were majority female (71%), white (89.5%), employed (79%), married (73.7%), with a mean age of 46.89. Majority of participants had 3 or more past major depressive episodes (68.4%) and were currently using anti-depressant medications (71%). Codes were organized into four main themes: evidence of concept comprehension, translation of MBCT content, translation of MBCT group process, and home practice. Within these four areas, participants highlighted the advantages and challenges of delivering MBCT in an online environment and endorsed learning and retaining central skills taught. **Conclusions:** This work will be used to inform programmatic changes to MMB including addition of an online community and alternatives to home practice expectations. Participants endorsed retaining central skills observed previously during in-person delivery of MBCT, and identified several advantages to online delivery including flexibility, reduced cost and time commitment. Overall feedback indicated a high level of participant satisfaction, which is encouraging as MMB could drastically widen the availability of an empirically based depression relapse prevention treatment.

Keywords: Major depressive disorder; Online psychological treatment

doi:10.3121/cmr.2014.1250.ps2-44