

# **30 cbt & psychotherapy relevant abstracts** **november/december '14 newsletter**

(Mayo-Wilson, Dias et al. 2014; Sharpe, Walker et al. 2014; Walker, Hansen et al. 2014)

Batelaan, N. M., D. Rhebergen, et al. (2014). **"Two-year course trajectories of anxiety disorders: Do dsm classifications matter?"** *J Clin Psychiatry* 75(9): 985-993. <http://www.ncbi.nlm.nih.gov/pubmed/24912140>

OBJECTIVE: Anxiety disorders have been shown to differ in their course, but it is unknown whether DSM-categories represent clinically relevant course trajectories. We aim to identify anxiety course trajectories using a data-driven method and to examine whether these course trajectories correspond to DSM-categories or whether other clinical indicators better differentiate them. METHOD: 907 patients with panic disorder with agoraphobia, panic disorder without agoraphobia, agoraphobia, social phobia, or generalized anxiety disorder according to DSM-IV criteria were derived from a prospective cohort study (Netherlands Study of Depression and Anxiety). Baseline data were collected between September 2004 and February 2007; follow-up data, between October 2006 and March 2009. Latent class growth analysis was conducted, based on symptoms of anxiety and avoidance assessed with the Life Chart Interview covering a 2-year time period. Identified course trajectories were compared with DSM-IV diagnoses and a wider set of predictors. RESULTS: We identified a class with minimal symptoms over time (41.7%), a moderately severe chronic class (42.8%), and a severe chronic class (15.4%). Panic disorder with agoraphobia (OR = 2.14; 95% CI, 1.48-3.09) and social phobia (OR = 1.97; 95% CI, 1.46-2.68) predicted moderately severe chronicity; panic disorder with agoraphobia (OR = 2.70; 95% CI, 1.66-4.40), social phobia (OR = 2.46; 95% CI, 1.62-3.74), and generalized anxiety disorder (OR = 1.86; 95% CI, 1.23-2.82) predicted a severe chronic course. However, baseline severity, duration of anxiety, and disability better predicted severe chronic course trajectories than DSM-categories. Additionally, partner status, age at onset, childhood trauma, and comorbid depressive disorder predicted chronic courses. CONCLUSIONS: Course of anxiety was pleomorphic with over 40% having a favorable course, thereby questioning the common notion of chronicity of anxiety disorders. Severity, duration of anxiety, and disability were able to better identify severe chronic course trajectories as compared with DSM-IV categories. These findings facilitate the identification of chronic course trajectories of anxiety disorders in clinical care and support current debates on staging and profiling of mental disorders.

Baxter, A. J., T. Vos, et al. (2014). **"The global burden of anxiety disorders in 2010."** *Psychological Medicine* 44(11): 2363-2374. <http://dx.doi.org/10.1017/S0033291713003243>

Background Despite their high prevalence, the global burden of anxiety disorders has never been calculated comprehensively. The new Global Burden of Disease (GBD) study has estimated burden due to morbidity and mortality caused by any anxiety disorder. Method Prevalence was estimated using Bayesian meta-regression informed by data identified in a systematic review. Years of life lived with disability (YLDs) were calculated by multiplying prevalent cases by an average disability weight based on severity proportions (mild, moderate and severe). Disability-adjusted life years (DALYs) were then calculated and age standardized using global standard population figures. Estimates were also made for additional suicide mortality attributable to anxiety disorders. Findings are presented for YLDs, DALYs and attributable burden due to suicide for 21 world regions in 1990 and 2010. Results Anxiety disorders were the sixth leading cause of disability, in terms of YLDs, in both high-income (HI) and low- and middle-income (LMI) countries. Globally, anxiety disorders accounted for 390 DALYs per 100 000 persons [95% uncertainty interval (UI) 191–371 DALYs per 100 000] in 2010, with no discernible change observed over time. Females accounted for about 65% of the DALYs caused by anxiety disorders, with the highest burden in both males and females experienced by those aged between 15 and 34 years. Although there was regional variation in prevalence, the overlap between uncertainty estimates means that substantive differences in burden between populations could not be identified. Conclusions Anxiety disorders are chronic, disabling conditions that are distributed across the globe. Future estimates of burden could be further improved by obtaining more representative data on severity state proportions.

Burstein, M., K. Beesdo-Baum, et al. (2014). **"Threshold and subthreshold generalized anxiety disorder among us adolescents: Prevalence, sociodemographic, and clinical characteristics."** *Psychological Medicine* 44(11): 2351-2362. <http://dx.doi.org/10.1017/S0033291713002997>

Background Threshold and subthreshold forms of generalized anxiety disorder (GAD) are highly prevalent and impairing conditions among adults. However, there are few general population studies that have examined these conditions during the early life course. The primary objectives of this study were to: (1) examine the prevalence, and sociodemographic and clinical characteristics of threshold and subthreshold forms of GAD in a nationally representative sample of US youth; and (2) test differences in sociodemographic and clinical characteristics between threshold and subthreshold forms of the disorder. Method The National Comorbidity Survey-Adolescent Supplement is a nationally representative face-to-face survey of 10 123 adolescents 13 to 18 years of age in the continental USA. Results Approximately 3% of adolescents met criteria for threshold GAD. Reducing the required duration from 6 months to 3 months resulted in a 65.7% increase in prevalence (5.0%); further relaxing the uncontrollability criterion led to an additional 20.7% increase in prevalence (6.1%). Adolescents with all forms of GAD displayed a recurrent clinical course marked by substantial impairment and co-morbidity with other psychiatric disorders. There were few significant differences in sociodemographic and clinical characteristics between threshold and subthreshold cases of GAD. Results also revealed age-related differences in the associated symptoms and clinical course of GAD. Conclusions Findings demonstrate the clinical significance of subthreshold forms of GAD among adolescent youth, highlighting the continuous nature of the GAD construct. Age-related differences in the associated symptoms and clinical course of GAD provide further support for criteria that capture variation in clinical features across development.

Daley, D., S. van der Oord, et al. (2014). **"Behavioral interventions in attention-deficit/hyperactivity disorder: A meta-analysis of randomized controlled trials across multiple outcome domains."** *Journal of the American Academy of Child & Adolescent Psychiatry* 53(8): 835-847. <http://www.sciencedirect.com/science/article/pii/S0890856714004080>

Objective Behavioral interventions are recommended as attention-deficit/hyperactivity disorder (ADHD) treatments. However, a recent meta-analysis found no effects on core ADHD symptoms when raters were probably blind to treatment allocation. The present analysis is extended to a broader range of child and parent outcomes. Method A systematic search in PubMed, Ovid, Web of Knowledge, ERIC, and CINAHAL databases (up to February 5, 2013) identified published randomized controlled trials measuring a range of patient and parent outcomes for children and adolescents diagnosed with ADHD (or who met validated cutoffs on rating scales). Results Thirty-two of 2,057 nonduplicate screened records were analyzed. For assessments made by individuals closest to the treatment setting (usually unblinded), there were significant improvements in parenting quality (standardized mean difference [SMD] for positive parenting 0.68; SMD for negative parenting 0.57), parenting self-concept (SMD 0.37), and child ADHD (SMD 0.35), conduct problems (SMD 0.26), social skills (SMD 0.47), and academic

performance (SMD 0.28). With probably blinded assessments, significant effects persisted for parenting (SMD for positive parenting 0.63; SMD for negative parenting 0.43) and conduct problems (SMD 0.31). Conclusion In contrast to the lack of blinded evidence of ADHD symptom decrease, behavioral interventions have positive effects on a range of other outcomes when used with patients with ADHD. There is blinded evidence that they improve parenting and decrease childhood conduct problems. These effects also may feed through into a more positive parenting self-concept but not improved parent mental well-being.

De Jong, K., R. Timman, et al. (2014). **"The effect of outcome monitoring feedback to clinicians and patients in short and long-term psychotherapy: A randomized controlled trial."** *Psychotherapy Research* 24(6): 629-639. <http://dx.doi.org/10.1080/10503307.2013.871079>

Objective. Outcome monitoring feedback has become popular, but its effect on treatment outcome has been mixed. Feedback seems most effective for patients who are not progressing well (?not on track? (NOT) cases). There are some indications that patient feedback has an additional effect and that feedback effects differentiate between short- and long-term therapy. This study aimed to evaluate the effect of outcome monitoring feedback to therapists and patients on outcome in short- and long-term psychotherapy. Methods. Patients (n = 475) were randomly assigned to three conditions: Feedback to therapist (FbT), feedback to therapist and patient (FbTP), and no feedback (NFb). Feedback consisted of progress charts based on the Outcome Questionnaire and a feedback message. Results. In short-term therapies (<35 weeks) FbT and FbTP was preventive of negative change for NOT cases. In long-term therapy only FbTP had a small positive effect on the rate of change. Feedback did not result in better outcomes at treatment ending, although there was a trend for FbTP to have fewer deteriorated cases. Conclusions. Benefits of feedback were strongest for cases that were not progressing well in short-term therapies when both the patient and therapist received feedback on the patients' progress. Contrary to previous findings, we also found a small effect of feedback to therapists and patients in long-term therapies. Feedback to both patients and therapists may be more effective than feedback to therapists alone due to implementation issues or empowerment of the patient.

Hendriks, S. M., J. Spijker, et al. (2014). **"Disability in anxiety disorders."** *Journal of Affective Disorders* 166(0): 227-233. <http://www.sciencedirect.com/science/article/pii/S016503271400278X>

Background This study compares disability levels between different anxiety disorders and healthy controls. We further investigate the role of anxiety arousal and avoidance behaviour in disability, and whether differences in these symptom patterns contribute to disability differences between anxiety disorders. Methods Data were from 1826 subjects from the Netherlands Study of Depression and Anxiety (NESDA). The Composite Interview Diagnostic Instrument was used to diagnose anxiety disorders. The World Health Organization Disability Assessment Schedule II was used to measure disability in six domains (cognition, mobility, selfcare, social interaction, life activities, participation). Severity of anxiety arousal and avoidance behaviour symptoms was measured using the Beck Anxiety Inventory and the Fear Questionnaire. Results All anxiety disorders were associated with higher disability. Disability was generally highest in multiple anxiety disorder (e.g. mean disability in cognition=33.7) and social anxiety disorder (mean=32.7), followed by generalized anxiety disorder (mean=27.2) and panic disorder with agoraphobia (mean=26.3), and lowest in panic disorder without agoraphobia (mean=22.1). Anxiety arousal was more associated with disability in life activities (B=8.5, p<0.001) and participation (B=9.9, p<0.001) whereas avoidance behaviour was more associated with disability in cognition (B=7.4, p<0.001) and social interaction (B=8.6, p<0.001). Different disability patterns between anxiety disorders were not completely explained by anxiety arousal and avoidance behaviour. Limitations The cross-sectional study design precludes any causal interpretations. In order to examine the full range of comorbidity among anxiety, a greater range of anxiety disorders would have been preferable. Conclusions Disability is highest in social anxiety disorder and multiple anxiety disorder. Both anxiety arousal and avoidance behaviour are associated with higher disability levels but do not fully explain the differences across anxiety disorders.

Ivins, A., M. Di Simplicio, et al. (2014). **"Mental imagery in bipolar affective disorder versus unipolar depression: Investigating cognitions at times of 'positive' mood."** *Journal of Affective Disorders* 166(0): 234-242. <http://www.sciencedirect.com/science/article/pii/S016503271400295X>

(Free full text available) Background Compared to unipolar depression (UD), depressed mood in bipolar disorder (BD) has been associated with amplified negative mental imagery of the future ('flashforwards'). However, imagery characteristics during positive mood remain poorly explored. We hypothesise first, that unlike UD patients, the most significant positive images of BD patients will be 'flashforwards' (rather than past memories). Second, that BD patients will experience more frequent (and more 'powerful') positive imagery as compared to verbal thoughts and third, that behavioural activation scores will be predicted by imagery variables in the BD group. Methods BD (n=26) and UD (n=26) patients completed clinical and trait imagery measures followed by an Imagery Interview and a measure of behavioural activation. Results Compared to UD, BD patients reported more 'flashforwards' compared to past memories and rated their 'flashforwards' as more vivid, exciting and pleasurable. Only the BD group found positive imagery more 'powerful', (preoccupying, 'real' and compelling) as compared to verbal thoughts. Imagery-associated pleasure predicted levels of drive and reward responsiveness in the BD group. Limitations A limitation in the study was the retrospective design. Moreover pathological and non-pathological periods of "positive" mood were not distinguished in the BD sample. Conclusions This study reveals BD patients experience positive 'flashforward' imagery in positive mood, with more intense qualities than UD patients. This could contribute to the amplification of emotional states and goal directed behaviour leading into mania, and differentiate BD from UD.

Joyal, C. C., A. Cossette, et al. (2014). **"What exactly is an unusual sexual fantasy?"** *The Journal of Sexual Medicine*: n/a-n/a. <http://dx.doi.org/10.1111/jsm.12734>

Introduction Although several theories and treatment plans use unusual sexual fantasies (SF) as a way to identify deviancy, they seldom describe how the fantasies referred to were determined to be unusual. Aim The main goal of this study was to determine which SF are rare, unusual, common, or typical from a statistical point of view among a relatively large sample of adults recruited from the general population. A secondary goal was to provide a statistical comparison of the nature and intensity of sexual fantasies for men and women. This study also aims at demonstrating with both quantitative and qualitative analyses that certain fantasies often considered to be unusual are common. Methods An Internet survey was conducted with 1,516 adults (799 ♀; 717 ♂) who ranked 55 different SF and wrote their own favorite SF. Each SF was rated as statistically rare (2.3% or less), unusual (15.9% or less), common (more than 50%), or typical (more than 84.1% of the sample). Main Outcome Measures An extended version of the Wilson's Sex Fantasy Questionnaire with an open question. Results Only two sexual fantasies were found to be rare for women or men, while nine others were unusual. Thirty sexual fantasies were common for one or both genders, and only five were typical. These results were confirmed with qualitative analyses. Submission and domination themes were not only common for both men and women, but they were also significantly related to each other. Moreover, the presence of a single submissive fantasy was a significant predictor of overall scores for all SF in both genders. Conclusion Care should be taken before labeling an SF as unusual, let alone deviant. It suggested that the focus should be on the effect of a sexual fantasy rather than its content.

Keyes, K. M., C. Pratt, et al. (2014). **"The burden of loss: Unexpected death of a loved one and psychiatric disorders across the life course in a national study."** *Am J Psychiatry* 171(8): 864-871.

<http://ajp.psychiatryonline.org/doi/abs/10.1176/appi.ajp.2014.13081132>

**OBJECTIVE:** Unexpected death of a loved one is common and associated with subsequent elevations in symptoms of multiple forms of psychopathology. Determining whether this experience predicts novel onset of psychiatric disorders and whether these associations vary across the life course has important clinical implications. The authors examined associations of a loved one's unexpected death with first onset of common anxiety, mood, and substance use disorders in a population-based sample. **METHOD:** The relation between unexpected death of a loved one and first onset of lifetime DSM-IV disorders was estimated by using a structured interview of adults in the U.S. general population (analytic sample size=27,534). Models controlled for prior occurrence of any disorder, other traumatic experiences, and demographic variables. **RESULTS:** Unexpected death of a loved one was the most common traumatic experience and most likely to be rated as the respondent's worst, regardless of other traumatic experiences. Increased incidence after unexpected death was observed at nearly every point across the life course for major depressive episode, panic disorder, and posttraumatic stress disorder. Increased incidence was clustered in later adult age groups for manic episode, phobias, alcohol use disorders, and generalized anxiety disorder. **CONCLUSIONS:** The bereavement period is associated with elevated risk for the onset of multiple psychiatric disorders, consistently across the life course and coincident with the experience of the loved one's death. Novel associations between unexpected death and onset of several disorders, including mania, confirm multiple case reports and results of small studies and suggest an important emerging area for clinical research and practice.

LaFrance, W., Jr, et al. (2014). **"Multicenter pilot treatment trial for psychogenic nonepileptic seizures: A randomized clinical trial."** *JAMA Psychiatry* 71(9): 997-1005. <http://dx.doi.org/10.1001/jamapsychiatry.2014.817>

**Importance** There is a paucity of controlled treatment trials for the treatment of conversion disorder, seizures type, also known as psychogenic nonepileptic seizures (PNES). Psychogenic nonepileptic seizures, the most common conversion disorder, are as disabling as epilepsy and are not adequately addressed or treated by mental health clinicians. **Objective** To evaluate different PNES treatments compared with standard medical care (treatment as usual). **Design, Setting, and Participants** Pilot randomized clinical trial at 3 academic medical centers with mental health clinicians trained to administer psychotherapy or psychopharmacology to outpatients with PNES. Thirty-eight participants were randomized in a blocked schedule among 3 sites to 1 of 4 treatment arms and were followed up for 16 weeks between September 2008 and February 2012; 34 were included in the analysis. **Interventions** Medication (flexible-dose sertraline hydrochloride) only, cognitive behavioral therapy informed psychotherapy (CBT-ip) only, CBT-ip with medication (sertraline), or treatment as usual. **Main Outcomes and Measures** Seizure frequency was the primary outcome; psychosocial and functioning measures, including psychiatric symptoms, social interactions, quality of life, and global functioning, were secondary outcomes. Data were collected prospectively, weekly, and with baseline, week 2, midpoint (week 8), and exit (week 16) batteries. Within-group analyses for each arm were performed on primary (seizure frequency) and secondary outcomes from treatment-blinded raters using an intention-to-treat analysis. **Results** The psychotherapy (CBT-ip) arm showed a 51.4% seizure reduction ( $P = .01$ ) and significant improvement from baseline in secondary measures including depression, anxiety, quality of life, and global functioning ( $P < .001$ ). The combined arm (CBT-ip with sertraline) showed 59.3% seizure reduction ( $P = .008$ ) and significant improvements in some secondary measures, including global functioning ( $P = .007$ ). The sertraline-only arm did not show a reduction in seizures ( $P = .08$ ). The treatment as usual group showed no significant seizure reduction or improvement in secondary outcome measures ( $P = .19$ ). **Conclusions and Relevance** This pilot randomized clinical trial for PNES revealed significant seizure reduction and improved comorbid symptoms and global functioning with CBT-ip for PNES without and with sertraline. There were no improvements in the sertraline-only or treatment-as-usual arms. This study supports the use of manualized psychotherapy for PNES and successful training of mental health clinicians in the treatment. Future studies could assess larger-scale intervention dissemination.

Lass-Hennemann, J. and T. Michael (2014). **"Endogenous cortisol levels influence exposure therapy in spider phobia."** *Behaviour Research and Therapy* 60(0): 39-45. <http://www.sciencedirect.com/science/article/pii/S0005796714000965>

Previous research in patients with phobia showed that the administration of glucocorticoids reduces fear in phobic situations and enhances exposure therapy. Glucocorticoids underlie a daily cycle with a peak in the morning and low levels during the evening and night. The aim of the present study was to investigate whether exposure is more effective when conducted in the morning when endogenous cortisol levels are high. Sixty patients meeting DSM IV criteria for specific phobia (animal type) were randomly assigned to one-session exposure treatment either at 08.00 a.m. (high cortisol group) or at 06.00 p.m. (low cortisol group). Participants returned for a posttreatment assessment one week after therapy and a follow-up assessment three months after therapy. Both groups showed good outcome, but patients treated in the morning exhibited significantly less fear of spiders in the behavioral approach test (BAT) and a trend for lower scores on the Fear of Spiders Questionnaire (FSQ) than patients treated in the evening. This effect was present at posttreatment and follow-up. Our findings indicate that exposure therapy is more effective in the morning than in the evening. We suggest that this may be due to higher endogenous cortisol levels in the morning group that enhance extinction memory.

Mayo-Wilson, E., S. Dias, et al. (2014). **"Psychological and pharmacological interventions for social anxiety disorder in adults: A systematic review and network meta-analysis."** *Lancet Psychiatry*.

[http://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366\(14\)70329-3/fulltext](http://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366(14)70329-3/fulltext)

(Free full text available) **Background:** Social anxiety disorder—a chronic and naturally unremitting disease that causes substantial impairment—can be treated with pharmacological, psychological, and self-help interventions. We aimed to compare these interventions and to identify which are most effective for the acute treatment of social anxiety disorder in adults. **Methods:** We did a systematic review and network meta-analysis of interventions for adults with social anxiety disorder, identified from published and unpublished sources between 1988 and Sept 13, 2013. We analysed interventions by class and individually. Outcomes were validated measures of social anxiety, reported as standardised mean differences (SMDs) compared with a waitlist reference. This study is registered with PROSPERO, number CRD42012003146. **Findings:** We included 101 trials (13 164 participants) of 41 interventions or control conditions (17 classes) in the analyses. Classes of pharmacological interventions that had greater effects on outcomes compared with waitlist were monoamine oxidase inhibitors (SMD  $-1.01$ , 95% credible interval [CrI]  $-1.56$  to  $-0.45$ ), benzodiazepines ( $-0.96$ ,  $-1.56$  to  $-0.36$ ), selective serotonin-reuptake inhibitors and serotonin-norepinephrine reuptake inhibitors (SSRIs and SNRIs;  $-0.91$ ,  $-1.23$  to  $-0.60$ ), and anticonvulsants ( $-0.81$ ,  $-1.36$  to  $-0.28$ ). Compared with waitlist, efficacious classes of psychological interventions were individual cognitive-behavioural therapy (CBT; SMD  $-1.19$ , 95% CrI  $-1.56$  to  $-0.81$ ), group CBT ( $-0.92$ ,  $-1.33$  to  $-0.51$ ), exposure and social skills ( $-0.86$ ,  $-1.42$  to  $-0.29$ ), self-help with support ( $-0.86$ ,  $-1.36$  to  $-0.36$ ), self-help without support ( $-0.75$ ,  $-1.25$  to  $-0.26$ ), and psychodynamic psychotherapy ( $-0.62$ ,  $-0.93$  to  $-0.31$ ). Individual CBT compared with psychological placebo (SMD  $-0.56$ , 95% CrI  $-1.00$  to  $-0.11$ ), and SSRIs and SNRIs compared with pill placebo ( $-0.44$ ,  $-0.67$  to  $-0.22$ ) were the only classes of

interventions that had greater effects on outcomes than appropriate placebo. Individual CBT also had a greater effect than psychodynamic psychotherapy (SMD  $-0.56$ , 95% CrI  $-1.03$  to  $-0.11$ ) and interpersonal psychotherapy, mindfulness, and supportive therapy ( $-0.82$ ,  $-1.41$  to  $-0.24$ ). Interpretation: Individual CBT (which other studies have shown to have a lower risk of side-effects than pharmacotherapy) is associated with large effect sizes. Thus, it should be regarded as the best intervention for the initial treatment of social anxiety disorder. For individuals who decline psychological intervention, SSRIs show the most consistent evidence of benefit.

Morath, J., M. Moreno-Villanueva, et al. (2014). **"Effects of psychotherapy on DNA strand break accumulation originating from traumatic stress."** *Psychotherapy and Psychosomatics* 83(5): 289-297.  
<http://www.karger.com/DOI/10.1159/000362739>

(Free full text available) Background: Previous research reveals an association between traumatic stress and an increased risk for numerous diseases, including cancer. At the molecular level, stress may increase carcinogenesis via increased DNA damage and impaired DNA repair mechanisms. We assessed DNA breakage in peripheral blood mononuclear cells from individuals with post-traumatic stress disorder (PTSD) and measured the cellular capacity to repair single-strand breaks after exposure to ionizing X-radiation. We also investigated the effect of psychotherapy on both DNA breakage and DNA repair. Methods: In a first study we investigated DNA breakage and repair in 34 individuals with PTSD and 31 controls. Controls were subdivided into 11 trauma-exposed subjects and 20 individuals without trauma exposure. In a second study, we analysed the effect of psychotherapy (Narrative Exposure Therapy) on DNA breakage and repair. Thirty-eight individuals with PTSD were randomly assigned to either a treatment or a waitlist control condition. Follow-up was performed 4 months and 1 year after therapy. Results: In study 1 we found higher levels of basal DNA breakage in individuals with PTSD and trauma-exposed subjects than in controls, indicating that traumatic stress is associated with DNA breakage. However, single-strand break repair was unimpaired in individuals with PTSD. In study 2, we found that psychotherapy reversed not only PTSD symptoms, but also DNA strand break accumulation. Conclusion: Our results show - for the first time in vivo - an association between traumatic stress and DNA breakage; they also demonstrate changes at the molecular level, i.e., the integrity of DNA, after psychotherapeutic interventions.

Mrazek, D. A., J. C. Hornberger, et al. (2014). **"A review of the clinical, economic, and societal burden of treatment-resistant depression: 1996–2013."** *Psychiatric Services* 65(8): 977-987.  
<http://ps.psychiatryonline.org/doi/abs/10.1176/appi.ps.201300059>

Treatment-resistant depression exacts a heavy price in treatment costs and lost productivity, reaching into the tens of billions of dollars, but its effects on the lives of patients are just as devastating. In this literature review, the authors summarize 62 studies documenting the disease's toll on quality of life, personal financial resources, and general health. The average patient in the included studies had experienced nearly four earlier episodes of depression, had not responded to 4.7 drug trials, and continued to meet or nearly meet criteria for severe depression. Objective: This literature review assessed the burden of treatment-resistant depression in the United States by compiling published data about the clinical, societal, and economic outcomes associated with failure to respond to one or more adequate trials of drug therapy. Methods: PubMed and the Tufts Cost-Effectiveness Analyses Registry were searched for English-language articles published between January 1996 and August 2013 that collected primary data about treatment-resistant depression. Two researchers independently assessed study quality and extracted data. Results: Sixty-two articles were included (N=59,462 patients). Patients with treatment-resistant depression had  $3.8 \pm 2.1$  prior depressive episodes and illness duration of  $4.4 \pm 3.3$  years and had completed  $4.7 \pm 2.7$  unsuccessful drug trials involving  $2.1 \pm 3$  drug classes. Response rates for treatment-resistant depression were  $36\% \pm 1\%$ . A total of  $17\% \pm 6\%$  of patients had prior suicide attempts ( $1.1 \pm 2$  attempts per patient). Quality-of-life scores (scale of 0–1, with 0 indicating death and 1 indicating perfect health) for patients with treatment-resistant depression were  $.41 \pm .8$  and  $.26 \pm .8$  points lower, respectively, than for patients who experienced remission or response. Annual costs for health care and lost productivity were \$5,481 and \$4,048 higher, respectively, for patients with treatment-resistant versus treatment-responsive depression. Conclusions: Treatment-resistant depression exacts a substantial toll on patients' quality of life. At current rates of 12%–20% among all depressed patients, treatment-resistant depression may present an annual added societal cost of \$29–\$48 billion, pushing up the total societal costs of major depression by as much as \$106–\$118 billion. These findings underscore the need for research on the mechanisms of depression, new therapeutic targets, existing and new treatment combinations, and tests to improve the efficacy of and adherence to treatments for treatment-resistant depression.

NICE (2014). **Bipolar disorder: The assessment and management of bipolar disorder in adults, children and young people in primary and secondary care**, National Institute for Health And Care Excellence.  
<https://www.nice.org.uk/guidance/cg185/resources>

(Free full text available) This guideline updates and replaces NICE clinical guideline 38 (published July 2006). It offers evidence based advice on the care and treatment of children, young people and adults with bipolar disorder. Bipolar disorder is a potentially lifelong and disabling condition characterised by episodes of mania (abnormally elevated mood or irritability and related symptoms with severe functional impairment or psychotic symptoms for 7 days or more) or hypomania (abnormally elevated mood or irritability and related symptoms with decreased or increased function for 4 days or more) and episodes of depressed mood. It is often comorbid with other disorders such as anxiety disorders, substance misuse, personality disorders and attention deficit hyperactivity disorder (ADHD). The peak age of onset is 15–19 years, and there is often a substantial delay between onset and first contact with mental health services. The lifetime prevalence of bipolar I disorder (mania and depression) is estimated at 1% of the adult population, and bipolar II disorder (hypomania and depression) affects approximately 0.4% of adults. Bipolar disorder in children under 12 years is very rare. Since the publication of the previous guideline (NICE clinical guideline 38) in 2006, there have been some important advances in our knowledge of the care pathway and treatment approaches that are most likely to benefit people with bipolar disorder. All areas of NICE clinical guideline 38 have been updated. This guideline covers the recognition, assessment and management of bipolar disorder in children, young people and adults. It includes specific recommendations for diagnosis in children and young people because presentation in these age groups can be complicated by other conditions such as ADHD. The recommendations apply to people with bipolar I, bipolar II, mixed affective and rapid cycling disorders. Non-bipolar affective disorders are not covered because these are addressed by other guidelines, and this guideline does not make specific recommendations about other mental disorders that commonly coexist with bipolar disorder.

Nordgren, L. B., E. Hedman, et al. (2014). **"Effectiveness and cost-effectiveness of individually tailored internet-delivered cognitive behavior therapy for anxiety disorders in a primary care population: A randomized controlled trial."** *Behaviour Research and Therapy* 59(0): 1-11. <http://www.sciencedirect.com/science/article/pii/S000579671400076X>  
(Available in free full text) A significant proportion of the general population suffers from anxiety disorders, often with comorbid psychiatric conditions. Internet-delivered cognitive behavior therapy (ICBT) has been found to be a potent treatment

for patients with specific psychiatric conditions. The aim of this trial was to investigate the effectiveness and cost-effectiveness of ICBT when tailoring the treatment to address comorbidities and preferences for primary-care patients with a principal anxiety disorder. One hundred participants were recruited through their primary-care contact and randomized to either treatment or an active control group. The treatment consisted of 7–10 weekly individually assigned modules guided by online therapists. At post-treatment, 46% of the treatment group had achieved clinically significant improvement on the primary outcome measure (CORE-OM) and between-group effect sizes ranged from  $d = 0.20$  to  $0.86$ , with a mean effect of  $d = 0.59$ . At one-year follow-up, within-group effect sizes varied between  $d = 0.53$  to  $1.00$ . Cost analysis showed significant reduction of total costs for the ICBT group, the results were maintained at one-year follow-up and the incremental cost-effectiveness ratio favored ICBT compared to control group. Individually tailored ICBT is an effective and cost-effective treatment for primary-care patients with anxiety disorders with or without comorbidities.

O'Neil, A., S. E. Quirk, et al. (2014). **"Relationship between diet and mental health in children and adolescents: A systematic review."** *Am J Public Health* 104(10): e31-42. <http://www.ncbi.nlm.nih.gov/pubmed/25208008>

(Available in free full text) We systematically reviewed 12 epidemiological studies to determine whether an association exists between diet quality and patterns and mental health in children and adolescents; 9 explored the relationship using diet as the exposure, and 3 used mental health as the exposure. We found evidence of a significant, cross-sectional relationship between unhealthy dietary patterns and poorer mental health in children and adolescents. We observed a consistent trend for the relationship between good-quality diet and better mental health and some evidence for the reverse. When including only the 7 studies deemed to be of high methodological quality, all but 1 of these trends remained. Findings highlight the potential importance of the relationship between dietary patterns or quality and mental health early in the life span.

Okumura, Y. and K. Ichikura (2014). **"Efficacy and acceptability of group cognitive behavioral therapy for depression: A systematic review and meta-analysis."** *Journal of Affective Disorders* 164(0): 155-164. <http://www.sciencedirect.com/science/article/pii/S0165032714002079>

Abstract Background Despite treatment guidelines for depression placing group cognitive behavioral therapy (group CBT) between low- and high-intensity evidence-based psychological interventions, the validity of the placement remains unknown. We aimed to systematically review evidence for the efficacy and acceptability of group CBT in patients with depression compared to four intensity levels of psychosocial interventions. Methods We searched the Cochrane Central Register of Controlled Trials, MEDLINE, PsycINFO, and Web of Science and hand-searched the references in identified publications. We selected randomized controlled trials comparing group CBT with four levels of interventions for adult patients with depression. Two authors independently assessed risk of bias. Results From 7953 records, we identified 35 studies that compared group CBT to non-active ( $k=30$ ), low-intensity ( $k=2$ ), middle-intensity ( $k=8$ ), and high-intensity ( $k=1$ ) interventions. Group CBT had a superior efficacy (standardized mean difference [SMD]= $-0.68$ ) and a similar acceptability compared to non-active controls. Pooled results showed a small but non-significant excess of group CBT relative to middle-intensity interventions (SMD= $-0.21$ ). Limitations Over 60% of studies did not report enough information to judge selection and selective reporting bias. Conclusions These results suggest the need for high-quality trials of group CBT compared to low- and high-intensity interventions.

Polnay, A., V. A. W. James, et al. (2014). **"Group therapy for people with bulimia nervosa: Systematic review and meta-analysis."** *Psychological Medicine* 44(11): 2241-2254. <http://dx.doi.org/10.1017/S0033291713002791>

Background Approximately 25% of people with bulimia nervosa (BN) who undertake therapy are treated in groups. National guidelines do not discriminate between group and individual therapy, yet each has potential advantages and disadvantages and it is unclear how their effects compare. We therefore evaluated how group therapy for BN compares with individual therapy, no treatment, or other therapies, in terms of remission from binges and binge frequency. Method We performed a systematic review and meta-analysis of randomized controlled trials of group therapies for BN, following standard guidelines. Results A total of 10 studies were included. Studies were generally small with unclear risk of bias. There was low-quality evidence of a clinically relevant advantage for group cognitive behavioural therapy (CBT) over no treatment at therapy end. Remission was more likely with group CBT versus no treatment [relative risk (RR) 0.77, 95% confidence interval (CI) 0.62–0.96]. Mean weekly binges were lower with group CBT versus no treatment (2.9 v. 6.9, standardized mean difference =  $-0.56$ , 95% CI  $-0.96$  to  $-0.15$ ). One study provided low-quality evidence that group CBT was inferior compared with individual CBT to a clinically relevant degree for remission at therapy end (RR 1.24, 95% CI 1.03–1.50); there was insufficient evidence regarding frequency of binges. Conclusions Conclusions could only be reached for CBT. Low-quality evidence suggests that group CBT is effective compared with no treatment, but there was insufficient or very limited evidence about how group and individual CBT compared. The risk of bias and imprecise estimates of effect invite further research to refine and increase confidence in these findings.

Pompili, M., D. Lester, et al. (2014). **"Bisexuality and suicide: A systematic review of the current literature."** *The Journal of Sexual Medicine* 11(8): 1903-1913. <http://dx.doi.org/10.1111/jsm.12581>

Introduction Many studies of lesbian, gay, and bisexual youth have demonstrated that individuals reporting a bisexual orientation have a particularly high risk of suicidal behavior and substance abuse. It has been also suggested that bisexual individuals (both men and women) have higher rates of depression and anxiety compared with homosexual and heterosexual groups. Aim The aim of the present article was to determine whether or not an association between bisexuality and suicidal behavior exists and to analyze risk factors for suicidal behavior in bisexual individuals. Main Outcome Measures The combined search strategies yielded a total of 339 records screened from PubMed, Scopus, and Web of Knowledge. Duplicate articles, articles that were not in English, and those that did not analyze bisexuality separately from homosexuality were excluded. A quality assessment was performed for each study included. Methods A careful systematic review of the literature was conducted investigating the potential bisexuality-suicidal behavior link. A total of 77 articles from peer-reviewed journals were considered, and the most relevant ( $N = 19$ ) were selected for this review. Results Individuals reporting a bisexual orientation had an increased risk of suicide attempts and ideation compared with their homosexual and heterosexual peers. Risk factors included related victimization, peer judgments, and family rejection. Bisexual individuals also reported higher rates of mental illness and substance abuse. Conclusions Bisexual individuals may experience more psychological distress and mental health problems than individuals who identify with a homosexual or heterosexual orientation. Clinicians should consider the potential for suicidal behaviors in bisexual individuals and be alert for increased mental health problems and poor social integration.

Rosenbaum, S., C. Sherrington, et al. (2014). **"Exercise augmentation compared with usual care for post-traumatic stress disorder: A randomized controlled trial."** *Acta Psychiatr Scand*. <http://www.ncbi.nlm.nih.gov/pubmed/25443996>

OBJECTIVE: To investigate the impact of a 12-week exercise programme in addition to usual care for post-traumatic stress disorder (PTSD). METHOD: An assessor-blinded randomized controlled trial was conducted among 81 participants with a DSM-IV-TR diagnosis of primary PTSD. Participants were recruited after admission to an in-patient programme at a private hospital. Participants were randomized to receive either usual care ( $n = 42$ ), or exercise in addition to usual care ( $n = 39$ ). The

exercise intervention involved three, 30-min resistance-training sessions/week and a pedometer-based walking programme. Usual care involved psychotherapy, pharmaceutical interventions, and group therapy. Primary outcome was PTSD symptoms assessed via the PTSD checklist-civilian version (PCL-C). Secondary outcomes included symptoms of depression, anthropometry, physical activity, mobility, strength, and sleep quality. RESULTS: Participants had a mean (SD) age of 47.8 years (12.1), 84% male. PTSD symptoms in the intervention group significantly reduced compared with the usual care group (mean difference = -5.4, 95% CI -10.5 to -0.3, P = 0.04, n = 58). There were significant between-group differences at follow-up for depressive symptoms, waist circumference, sleep quality, and sedentary time. CONCLUSION: This study provides the first evidence that an exercise intervention is associated with reduced PTSD and depressive symptoms, reduced waist circumference, and improved sleep quality.

Rosenbaum, S., A. Tiedemann, et al. (2014). **"Physical activity interventions for people with mental illness: A systematic review and meta-analysis."** *J Clin Psychiatry* 75(9): 964-974. <http://www.ncbi.nlm.nih.gov/pubmed/24813261>

OBJECTIVE: To determine effects of physical activity on depressive symptoms (primary objective), symptoms of schizophrenia, anthropometric measures, aerobic capacity, and quality of life (secondary objectives) in people with mental illness and explore between-study heterogeneity. DATA SOURCES: MEDLINE, Cochrane Controlled Trials Register, PsycINFO, CINAHL, Embase, and the Physiotherapy Evidence Database (PEDro) were searched from earliest record to 2013. STUDY SELECTION: Randomized controlled trials of adults with a DSM-IV-TR, ICD-10, or clinician-confirmed diagnosis of a mental illness other than dysthymia or eating disorders were selected. Interventions included exercise programs, exercise counseling, lifestyle interventions, tai chi, or physical yoga. Study methodological quality and intervention compliance with American College of Sports Medicine (ACSM) guidelines were also assessed. DATA EXTRACTION AND ANALYSIS: Two investigators extracted data. Data were pooled using random-effects meta-analysis. Meta-regression was used to examine sources of between-study heterogeneity. RESULTS: Thirty-nine eligible trials were identified. The primary meta-analysis found a large effect of physical activity on depressive symptoms (n = 20; standardized mean difference (SMD) = 0.80). The effect size in trial interventions that met ACSM guidelines for aerobic exercise did not differ significantly from those that did not meet these guidelines. The effect for trials with higher methodological quality was smaller than that observed for trials with lower methodological quality (SMD = 0.39 vs 1.35); however, the difference was not statistically significant. A large effect was found for schizophrenia symptoms (SMD = 1.0), a small effect was found for anthropometry (SMD = 0.24), and moderate effects were found for aerobic capacity (SMD = 0.63) and quality of life (SMD = 0.64). CONCLUSIONS: Physical activity reduced depressive symptoms in people with mental illness. Larger effects were seen in studies of poorer methodological quality. Physical activity reduced symptoms of schizophrenia and improved anthropometric measures, aerobic capacity, and quality of life among people with mental illness.

Sala, R., B. I. Goldstein, et al. (2014). **"Childhood maltreatment and the course of bipolar disorders among adults: Epidemiologic evidence of dose-response effects."** *Journal of Affective Disorders* 165(0): 74-80.

<http://www.sciencedirect.com/science/article/pii/S0165032714002298>

Background Childhood maltreatment (CM) is highly prevalent among individuals with bipolar disorders (BP); however few studies have examined its potential role in the course and outcome of individuals with BP. We aim to examine the dose response relationship between the number of types of CM and the course of individuals with BP. Methods As part of the National Epidemiologic Survey on Alcohol and Related Conditions, 1600 adults who met lifetime DSM-IV criteria for BP-I (n=1172) and BP-II (n=428) were included. Individuals were evaluated using the Alcohol Use Disorder and Associated Disabilities Interview Schedule-DMS-IV Version and data was analyzed lifetime and from Waves 1 and 2, approximately 3 years apart. Results Around half of individuals with BP had a history of at least one type of CM. Overall, there was a clear dose-response relationship between number of CM and severity of BP across several domains, including clinical characteristics, probability of treatment, lifetime prevalence of psychiatric comorbidity, incidence of anxiety disorders, substance use disorder, and nicotine dependence, and level of psychosocial functioning. Limitations The interviews were conducted by lay professional interviewers rather than clinicians, use of retrospective report to determine CM in individuals with BP, and not all respondents from Wave 1 were able to be interviewed in Wave 2. Conclusions The number of types of CM confers developmental differences in the course of BP with a worse course and outcome of BP. Early identification and treatment of CM are warranted to improve the course and outcome of individuals with BP.

Sharma, E., K. Thennarasu, et al. (2014). **"Long-term outcome of obsessive-compulsive disorder in adults: A meta-analysis."** *J Clin Psychiatry* 75(9): 1019-1027. <http://www.ncbi.nlm.nih.gov/pubmed/25295427>

OBJECTIVE: To study the long-term rate and predictors of remission in adults with obsessive-compulsive disorder (OCD), using meta-analysis. DATA SOURCES: The MEDLINE database was searched to May 2013 using the search terms obsessive-compulsive disorder, prospective, outcome study, clinical course, remission, prognosis, follow-up, and long-term and limits for language (English), species (humans), and age (adults). This was supplemented by manual bibliographic cross-referencing. STUDY SELECTION: English-language studies from peer-reviewed journals on adults with DSM-III-R, DSM-IV, DSM-IV-TR, ICD-9, or ICD-10 diagnosis of OCD followed up for  $\geq 1$  year and treated with serotonin reuptake inhibitors and/or cognitive-behavioral therapy that reported rate of remission (Yale-Brown Obsessive Compulsive Scale [YBOCS] score  $< 16$  at longest follow-up) were included. DATA EXTRACTION: Data were gathered as numbers/means/percentages/categories on sample size, study design, follow-up duration, age at assessment, illness duration, age at illness onset, gender, marital status, inpatient/outpatient status, family history, baseline YBOCS score, comorbidities, and remission. RESULTS: Seventeen studies (pooled N = 1,265) fit the selection criteria and were used for the meta-analysis. The pooled sample had a mean follow-up duration 4.91 years and was predominantly male and outpatient and had onset of illness in the second decade, illness duration more than 10 years, and moderate-to-severe OCD. Pooled remission rate was 53% (95% CI, 42%-65%). Prospective studies showed higher pooled remission rate than retrospective studies (55% [95% CI, 45%-65%] vs 50% [95% CI, 27%-73%], P < .001). Indian studies showed higher pooled remission rate than others (71% [95% CI, 59%-83%] vs 48% [95% CI, 37%-59%], P < .001). Age at onset (t = -7.08, P = .019), illness duration (t = -8.13, P = .015), baseline YBOCS score (t = -6.81, P = .021), and male gender (t = -5.92, P = .027) had significant negative association with remission on meta-regression. CONCLUSION: A high long-term remission rate found in this meta-analysis is contrary to generally held beliefs about poor outcome of individuals with OCD. Multicenter, prospective, long-term studies should systematically examine course and outcome in larger samples, emphasizing symptomatic and functional recovery.

Sharpe, M., J. Walker, et al. (2014). **"Integrated collaborative care for comorbid major depression in patients with cancer (smart oncology-2): A multicentre randomised controlled effectiveness trial."** *The Lancet* 384(9948): 1099-1108. <http://www.sciencedirect.com/science/article/pii/S0140673614612319>

Summary Background Medical conditions are often complicated by major depression, with consequent additional impairment of quality of life. We aimed to compare the effectiveness of an integrated treatment programme for major depression in patients with cancer (depression care for people with cancer) with usual care. Methods SMaRT Oncology-2 is a parallel-group, multicentre, randomised controlled effectiveness trial. We enrolled outpatients with major depression from three

cancer centres and their associated clinics in Scotland, UK. Participants were randomly assigned in a 1:1 ratio to the depression care for people with cancer intervention or usual care, with stratification (by trial centre) and minimisation (by age, primary cancer, and sex) with allocation concealment. Depression care for people with cancer is a manualised, multicomponent collaborative care treatment that is delivered systematically by a team of cancer nurses and psychiatrists in collaboration with primary care physicians. Usual care is provided by primary care physicians. Outcome data were collected up until 48 weeks. The primary outcome was treatment response ( $\geq 50\%$  reduction in Symptom Checklist Depression Scale [SCL-20] score, range 0–4) at 24 weeks. Trial statisticians and data collection staff were masked to treatment allocation, but participants could not be masked to the allocations. Analyses were by intention to treat. This trial is registered with Current Controlled Trials, number ISRCTN40568538. Findings 500 participants were enrolled between May 12, 2008, and May 13, 2011; 253 were randomly allocated to depression care for people with cancer and 247 to usual care. 143 (62%) of 231 participants in the depression care for people with cancer group and 40 (17%) of 231 in the usual care group responded to treatment: absolute difference 45% (95% CI 37–53), adjusted odds ratio 8.5 (95% CI 5.5–13.4),  $p < 0.0001$ . Compared with patients in the usual care group, participants allocated to the depression care for people with cancer programme also had less depression, anxiety, pain, and fatigue; and better functioning, health, quality of life, and perceived quality of depression care at all timepoints (all  $p < 0.05$ ). During the study, 34 cancer-related deaths occurred (19 in the depression care for people with cancer group, 15 in the usual care group), one patient in the depression care for people with cancer group was admitted to a psychiatric ward, and one patient in this group attempted suicide. None of these events were judged to be related to the trial treatments or procedures. Interpretation Our findings suggest that depression care for people with cancer is an effective treatment for major depression in patients with cancer. It offers a model for the treatment of depression comorbid with other medical conditions.

Walker, J., C. H. Hansen, et al. (2014). **"Integrated collaborative care for major depression comorbid with a poor prognosis cancer (smart oncology-3): A multicentre randomised controlled trial in patients with lung cancer."** *The Lancet Oncology* 15(10): 1168-1176. <http://www.sciencedirect.com/science/article/pii/S1470204514703432>

**Background** The management of depression in patients with poor prognosis cancers, such as lung cancer, creates specific challenges. We aimed to assess the efficacy of an integrated treatment programme for major depression in patients with lung cancer compared with usual care. **Methods** Symptom Management Research Trials (SMaRT) Oncology-3 is a parallel-group, multicentre, randomised controlled trial. We enrolled patients with lung cancer and major depression from three cancer centres and their associated clinics in Scotland, UK. Participants were randomly assigned in a 1:1 ratio to the depression care for people with lung cancer treatment programme or usual care by a database software algorithm that used stratification (by trial centre) and minimisation (by age, sex, and cancer type) with allocation concealment. Depression care for people with lung cancer is a manualised, multicomponent collaborative care treatment that is systematically delivered by a team of cancer nurses and psychiatrists in collaboration with primary care physicians. Usual care is provided by primary care physicians. The primary outcome was depression severity (on the Symptom Checklist Depression Scale [SCL-20], range 0–4) averaged over the patient's time in the trial (up to a maximum of 32 weeks). Trial statisticians and data collection staff were masked to treatment allocation, but patients and clinicians could not be masked to the allocations. Analyses were by intention to treat. This trial is registered with Current Controlled Trials, number ISRCTN75905964. Findings 142 participants were recruited between Jan 5, 2009, and Sept 9, 2011; 68 were randomly allocated to depression care for people with lung cancer and 74 to usual care. 43 (30%) of 142 patients had died by 32 weeks, all of which were cancer-related deaths. No intervention-related serious adverse events occurred. 131 (92%) of 142 patients provided outcome data (59 in the depression care for people with lung cancer group and 72 in the usual care group) and were included in the intention-to-treat primary analysis. Average depression severity was significantly lower in patients allocated to depression care for people with lung cancer (mean score on the SCL-20 1.24 [SD 0.64]) than in those allocated to usual care (mean score 1.61 [SD 0.58]); difference  $-0.38$  (95% CI  $-0.58$  to  $-0.18$ ); standardised mean difference  $-0.62$  (95% CI  $-0.94$  to  $-0.29$ ). Self-rated depression improvement, anxiety, quality of life, role functioning, perceived quality of care, and proportion of patients achieving a 12-week treatment response were also significantly better in the depression care for people with lung cancer group than in the usual care group. Interpretation Our findings suggest that major depression can be treated effectively in patients with a poor prognosis cancer; integrated depression care for people with lung cancer was substantially more efficacious than was usual care. Larger trials are now needed to estimate the effectiveness and cost-effectiveness of this care programme in this patient population, and further adaptation of the treatment will be necessary to address the unmet needs of patients with major depression and even shorter life expectancy. Funding Cancer Research UK and Chief Scientist Office of the Scottish Government.

Walker, J., C. H. Hansen, et al. (2014). **"Prevalence, associations, and adequacy of treatment of major depression in patients with cancer: A cross-sectional analysis of routinely collected clinical data."** *The Lancet Psychiatry* 1(5): 343-350. <http://www.sciencedirect.com/science/article/pii/S221503661470313X>

**Summary Background** Major depression is an important complication of cancer. However, reliable data are lacking for the prevalence of depression in patients with cancer in different primary sites, the association of depression with demographic and clinical variables within cancer groupings, and the proportion of depressed patients with cancer receiving potentially effective treatment for depression. We investigated these questions with data from a large representative clinical sample. **Methods** We analysed data from patients with breast, lung, colorectal, genitourinary, or gynaecological cancer who had participated in routine screening for depression in cancer clinics in Scotland, UK between May 12, 2008, and Aug 24, 2011. Depression screening was done in two stages (first, Hospital Anxiety and Depression Scale; then, major depression section of the Structured Clinical Interview for the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition). Data for depression status were linked with demographic and clinical data obtained from the Scottish National Cancer Registry. **Findings** We analysed data for 21 151 patients. The prevalence of major depression was highest in patients with lung cancer (13.1%, 95% CI 11.9–14.2%), followed by gynaecological cancer (10.9%, 9.8–12.1), breast cancer (9.3%, 8.7–10.0), colorectal cancer (7.0%, 6.1–8.0), and genitourinary cancer (5.6%, 4.5–6.7). Within these cancer groupings, a diagnosis of major depression was more likely in patients who were younger, had worse social deprivation scores, and, for lung cancer and colorectal cancer, female patients. 1130 (73%) of 1538 patients with depression and complete patient-reported treatment data were not receiving potentially effective treatment. Interpretation Major depression is common in patients attending cancer clinics and most goes untreated. A pressing need exists to improve the management of major depression for patients attending specialist cancer services. Funding Cancer Research UK and Chief Scientist Office of the Scottish Government.

Wardenaar, K. J., H. J. Conradi, et al. (2014). **"Personality modulates the efficacy of treatment in patients with major depressive disorder."** *J Clin Psychiatry* 75(9): e916-923. <http://www.ncbi.nlm.nih.gov/pubmed/25295434>

**OBJECTIVE:** Effects of depression treatment are obscured by heterogeneity among patients. Personality types could be one source of heterogeneity that explains variability in treatment response. Clinically meaningful variations in personality patterns could be captured with data-driven subgroups. The aim of this study was to identify such personality types and to explore their predictive value for treatment efficacy. **METHOD:** Participants (N = 146) in the current exploratory study came from a randomized controlled trial in primary care depressed patients, conducted between January 1998 and June 2003,

comparing different treatments. All participants were diagnosed with a major depressive disorder (MDD) according to the DSM-IV. Primary (care as usual [CAU] or CAU plus a psychoeducational prevention program [PEP]) and specialized (CAU + PEP + psychiatric consultation or cognitive-behavioral therapy) treatment were compared. Personality was assessed with the Neuroticism-Extraversion-Openness Five-Factor Inventory (NEO-FFI). Personality classes were identified with latent profile analysis (LPA). During 1 year, weekly depression ratings were obtained by trimonthly assessment with the Composite International Diagnostic Interview. Mixed models were used to analyze the effects of personality on treatment efficacy. RESULTS: A 2-class LPA solution fit best to the NEO-FFI data: Class 1 (vulnerable, n = 94) was characterized by high neuroticism, low extraversion, and low conscientiousness, and Class 2 (resilient, n = 52) by medium neuroticism and extraversion and higher agreeableness and conscientiousness. Recovery was quicker in the resilient class (class x time:  $P < .001$ ). Importantly, specialized treatment had added value only in the vulnerable class, in which it was associated with quicker recovery than primary treatment (class x time x treatment:  $P < .001$ ). CONCLUSIONS: Personality profile may predict whether specialized clinical efforts have added value, showing potential implications for planning of treatments.

Wiersma, J. E., D. J. F. Van Schaik, et al. (2014). **"The effectiveness of the cognitive behavioral analysis system of psychotherapy for chronic depression: A randomized controlled trial."** *Psychotherapy and Psychosomatics* 83(5): 263-269. <http://www.karger.com/DOI/10.1159/000360795>

It is widely agreed that chronic depression is difficult to treat, knowledge about optimal treatment approaches is emerging. A multisite randomized controlled trial was conducted comparing the cognitive behavioral analysis system of psychotherapy (CBASP), a psychotherapy model developed specifically to treat chronic depression (n = 67) with care as usual (CAU; evidence-based treatments, n = 72) over a period of 52 weeks, with 23 sessions on average, in 3 outpatient clinics in the Netherlands. In both arms algorithm-based pharmacotherapy was provided. Patients (aged 18-65) met criteria for a DSM-IV diagnosis of major depressive disorder with diagnostic specifiers (chronic, without interepisode recovery) or with co-occurring dysthymic disorder indicating a chronic course. The Inventory for Depressive Symptomatology (IDS) Self-Report was used as the primary outcome measure. Mixed-effects linear regression analysis was used to compare the changes on the IDS scores between CBASP and CAU. The IDS was administered before treatment, and after 8, 16, 32 and 52 weeks. Results: At week 52, patients assigned to CBASP had a greater reduction of depressive symptoms compared to patients assigned to CAU ( $t = -2.00$ ,  $p = 0.05$ ). However, CBASP and CAU did not differ from each other on the IDS after 8 weeks ( $t = 0.49$ ,  $p = 0.63$ ), 16 weeks ( $t = -0.03$ ,  $p = 0.98$ ) and 32 weeks ( $t = -0.17$ ,  $p = 0.86$ ) of treatment. Conclusions: This trial shows that CBASP is at least as effective as standard evidence-based treatments for chronic depression. In the long run, CBASP appears to have an added effect.

Wunsch, E.-M., S. Kliem, et al. (2014). **"Population-based cost-offset estimation for the treatment of borderline personality disorder: Projected costs in a currently running, ideal health system."** *Behaviour Research and Therapy* 60(0): 1-7. <http://www.sciencedirect.com/science/article/pii/S0005796714000837>

Borderline personality disorder (BPD) is considered one of the most expensive mental disorders in terms of direct and indirect costs. The aim of this study was to carry out a cost-offset estimation of disorder-specific psychotherapy for BPD at the population level. The study investigated whether the possible financial benefits of dialectical behavior therapy outweigh the therapy costs, assuming a currently running, ideal health system, and whether the estimated cost-benefit relationships change depending upon the number of patients willing to be treated. A formula was elaborated that allows the user to calculate cost-benefit relationships for various conservative or progressive scenarios, with different stages of individuals' willingness to be treated (10%-90%). The possible costs and benefits of BPD-related treatment were evaluated using a 12-month, prevalence-based approach. The annual costs for untreated BPD were 8.69 billion EUR annually. The cost-benefit relationship for the treatment remained constant at 1.52 for all scenarios, implying that for each EUR invested, 1.52 EUR can be gained within one year, independent of the willingness to be treated. Additional intangible benefits were calculated with the aid of Quality-Adjusted Life Years. Findings suggest that BPD-related treatment might well be efficient at the population level.

(Batelaan, Rhebergen et al. 2014; Baxter, Vos et al. 2014; Burstein, Beesdo-Baum et al. 2014; Daley, van der Oord et al. 2014; De Jong, Timman et al. 2014; Hendriks, Spijker et al. 2014; Ivins, Di Simplicio et al. 2014; Joyal, Cossette et al. 2014; Keyes, Pratt et al. 2014; LaFrance, Jr et al. 2014; Lass-Hennemann and Michael 2014; Morath, Moreno-Villanueva et al. 2014; Mrazek, Hornberger et al. 2014; NICE 2014; Nordgren, Hedman et al. 2014; O'Neil, Quirk et al. 2014; Okumura and Ichikura 2014; Polnay, James et al. 2014; Pompili, Lester et al. 2014; Rosenbaum, Sherrington et al. 2014; Rosenbaum, Tiedemann et al. 2014; Sala, Goldstein et al. 2014; Sharma, Thennarasu et al. 2014; Walker, Hansen et al. 2014; Wardenaar, Conradi et al. 2014; Wiersma, Van Schaik et al. 2014; Wunsch, Kliem et al. 2014)