

30 depression-relevant abstracts

september '14 newsletter

(Abbass, Kisely et al. 2014; Barber, Zilcha-Mano et al. 2014; Berking, Wirtz et al. 2014; Bhattacharya, Shen et al. 2014; Cuijpers, Karyotaki et al. 2014; Finzi and Rosenthal 2014; Freeman, Sammel et al. 2014; Gerrits, van Oppen et al. 2014; Hollon, DeRubeis et al. 2014; Horrell, Goldsmith et al. 2014; Kemp, Lickel et al. 2014; Kendler and Aggen 2014; Kendler and Gardner 2014; Lai, Hiles et al. 2014; Lapidus, Levitch et al. 2014; Menchetti, Rucci et al. 2014; O'Mahen, Richards et al. 2014; Radkovsky, McArdle et al. 2014; Sarris, O'Neil et al. 2014; Shaffer, Edmondson et al. 2014; Shahab, Andrew et al. 2014; Stahl, Albert et al. 2014; Takizawa, Maughan et al. 2014; Tan, Wang et al. 2014; Taylor, McNeill et al. 2014; Unlu Ince, Riper et al. 2014; van Zoonen, Buntrock et al. 2014; Wang, Chen et al. 2014; Weissman 2014; Williams, Crane et al. 2014)

Abbass, A. A., S. R. Kisely, et al. (2014). **"Short-term psychodynamic psychotherapies for common mental disorders."** *Cochrane Database Syst Rev* 7: CD004687. <http://www.ncbi.nlm.nih.gov/pubmed/24984083>

BACKGROUND: Since the mid-1970s, short-term psychodynamic psychotherapies (STPP) for a broad range of psychological and somatic disorders have been developed and studied. Early published meta-analyses of STPP, using different methods and samples, have yielded conflicting results, although some meta-analyses have consistently supported an empirical basis for STPP. This is an update of a review that was last updated in 2006. **OBJECTIVES:** To evaluate the efficacy of STPP for adults with common mental disorders compared with wait-list controls, treatments as usual and minimal contact controls in randomised controlled trials (RCTs). To specify the differential effects of STPP for people with different disorders (e.g. depressive disorders, anxiety disorders, somatoform disorders, mixed disorders and personality disorder) and treatment characteristics (e.g. manualised versus non-manualised therapies). **SEARCH METHODS:** The Cochrane Depression, Anxiety and Neurosis Group's Specialised Register (CCDANCTR) was searched to February 2014, this register includes relevant randomised controlled trials from The Cochrane Library (all years), EMBASE (1974-), MEDLINE (1950-) and PsycINFO (1967-). We also conducted searches on CENTRAL, MEDLINE, EMBASE, CINAHL, PsycINFO, DARE and Biological Abstracts (all years to July 2012) and all relevant studies (identified to 2012) were fully incorporated in this review update. We checked references from papers retrieved. We contacted a large group of psychodynamic researchers in an attempt to find new studies. **SELECTION CRITERIA:** We included all RCTs of adults with common mental disorders, in which a brief psychodynamic therapy lasting 40 or fewer hours in total was provided in individual format. **DATA COLLECTION AND ANALYSIS:** Eight review authors working in pairs evaluated studies. We selected studies only if pairs of review authors agreed that the studies met inclusion criteria. We consulted a third review author if two review authors could not reach consensus. Two review authors collected data and entered it into Review Manager software. Two review authors assessed and scored risk of bias. We assessed publication bias using a funnel plot. Two review authors conducted and reviewed subgroup analyses. **MAIN RESULTS:** We included 33 studies of STPP involving 2173 randomised participants with common mental disorders. Studies were of diverse conditions in which problems with emotional regulation were purported to play a causative role albeit through a range of symptom presentations. These studies evaluated STPP for this review's primary outcomes (general, somatic, anxiety and depressive symptom reduction), as well as interpersonal problems and social adjustment. Except for somatic measures in the short-term, all outcome categories suggested significantly greater improvement in the treatment versus the control groups in the short-term and medium-term. Effect sizes increased in long-term follow-up, but some of these effects did not reach statistical significance. A relatively small number of studies (N < 20) contributed data for the outcome categories. There was also significant heterogeneity between studies in most categories, possibly due to observed differences between manualised versus non-manualised treatments, short versus longer treatments, studies with observer-rated versus self report outcomes, and studies employing different treatment models. **AUTHORS' CONCLUSIONS:** There has been further study of STPP and it continues to show promise, with modest to large gains for a wide variety of people. However, given the limited data, loss of significance in some measures at long-term follow-up and heterogeneity between studies, these findings should be interpreted with caution. Furthermore, variability in treatment delivery and treatment quality may limit the reliability of estimates of effect for STPP. Larger studies of higher quality and with specific diagnoses are warranted.

Barber, J. P., S. Zilcha-Mano, et al. (2014). **"The associations among improvement and alliance expectations, alliance during treatment, and treatment outcome for major depressive disorder."** *Psychotherapy Research* 24(3): 257-268. <http://dx.doi.org/10.1080/10503307.2013.871080>

Objective: To examine the associations between treatment/outcome expectations, alliance before and during treatment, and the impact of alliance on symptomatic improvement. **Methods:** One hundred and fifty-three depressed patients randomized to dynamic supportive-expressive psychotherapy (SET), antidepressant medication (ADM) or placebo (PBO) + clinical management completed ratings of treatment expectations, therapeutic alliance (CALPAS, WAI-S), and depressive symptoms (HAM-D). **Results:** Pretreatment expectations of the therapeutic alliance were significantly related to alliance later in therapy but did not differ across treatments and did not predict outcome. Alliance development over time differed between treatments; it increased more in SET than in PBO. After controlling for prior symptom improvement, early alliance predicted subsequent depression change. **Conclusions:** Expectations of alliance and of treatment outcome/improvement, measured prior to treatment onset, predicted subsequent alliance.

Berking, M., C. M. Wirtz, et al. (2014). **"Emotion regulation predicts symptoms of depression over five years."** *Behav Res Ther* 57C: 13-20. <http://www.ncbi.nlm.nih.gov/pubmed/24754907>

Deficits in emotion regulation have been identified as an important risk and maintaining factor for depression. The aim of this study was to examine the long-term effects of emotion regulation on symptoms of depression. Moreover, we investigated which specific emotion regulation skills were associated with subsequent symptoms of depression. Participants were 116 individuals (78% women, average age 35.2 years) who registered for an online-based assessment of depression and its risk-factors and reported at least some symptoms of depression. Successful application of emotion regulation skills and depressive symptom severity were assessed twice over a 5-year period. We utilized cross-lagged panel analyses to assess whether successful skills application would be negatively associated with subsequent depressive symptom severity. Cross-lagged panel analyses identified successful skills application as a significant predictor for depressive symptom severity even when controlling for the effects of initial symptoms of depression. A comparison of the effect sizes for different emotion regulation skills on subsequent depressive symptoms suggests that most of the skills included have similar predictive value. These findings provide preliminary evidence for the hypotheses that deficits in emotion regulation may contribute to the development of depression and that interventions systematically enhancing adaptive emotion regulation skills may help prevent and treat depressive symptoms.

Bhattacharya, R., C. Shen, et al. (2014). **"Excess risk of chronic physical conditions associated with depression and anxiety."** *BMC Psychiatry* 14(1): 10. <http://www.biomedcentral.com/1471-244X/14/10>

(Available in free full text) **BACKGROUND:** Depression and anxiety have been reported to be associated with chronic physical conditions. We examined the excess risk of chronic physical conditions associated with depression and/or anxiety within a multivariate framework controlling for demographic and modifiable lifestyle risk factors. **METHODS:** We used a retrospective cross-sectional study design. Study participants were adults aged 22-64 years from 2007 and 2009 Medical Expenditure Panel Survey. We defined presence of depression-anxiety based on self-reported depression and anxiety and classified adults into 4 groups: 1) depression only; 2) anxiety only; 3) comorbid depression and anxiety 4) no depression and no anxiety. We included presence/absence of arthritis, asthma, chronic obstructive pulmonary disorder, diabetes, heart disease, hypertension, and osteoporosis as dependent variables. Complementary log-log regressions were used to examine the excess risk associated with depression and/or anxiety for chronic physical conditions using a multivariate framework that controlled for demographic (gender, age, race/ethnicity) and modifiable lifestyle (obesity, lack of physical activity, smoking) risk factors. Bonferroni correction for multiple comparisons was applied and p [less than or equal to] 0.007 was considered statistically significant. **RESULTS:** Overall, 7% had only depression, 5.2% had only anxiety and 2.5% had comorbid depression and anxiety. Results from multivariable regressions indicated that compared to individuals with no depression and no anxiety, individuals with comorbid depression and anxiety, with depression only and with anxiety only, all had higher risk of all the chronic physical conditions. ARR for comorbid depression and anxiety ranged from 2.47 (95% CI: 1.47, 4.15; $P=0.0007$) for osteoporosis to 1.64 (95% CI: 1.33, 2.04; $P<0.0001$) for diabetes. Presence of depression only was also found to be significantly associated with all chronic conditions except for osteoporosis. Individuals with anxiety only were found to have a higher risk for arthritis, COPD, heart disease and hypertension. **CONCLUSION:** Presence of depression and/or anxiety conferred an independent risk for having chronic physical conditions after adjusting for demographic and modifiable lifestyle risk factors.

Cuijpers, P., E. Karyotaki, et al. (2014). **"The effects of psychotherapies for major depression in adults on remission, recovery and improvement: A meta-analysis."** *J Affect Disord* 159: 118-126. <http://www.ncbi.nlm.nih.gov/pubmed/24679399>

BACKGROUND: Standardised effect sizes have been criticized because they are difficult to interpret and offer little clinical information. This meta-analysis examines the extent of actual improvement, the absolute numbers of patients no longer meeting criteria for major depression, and absolute rates of response and remission. **METHODS:** We conducted a meta-analysis of 92 studies with 181 conditions (134 psychotherapy and 47 control conditions) with 6937 patients meeting criteria for major depressive disorder. Within these conditions, we calculated the absolute number of patients no longer meeting criteria for major depression, rates of response and remission, and the absolute reduction on the BDI, BDI-II, and HAM-D. **RESULTS:** After treatment, 62% of patients no longer met criteria for MDD in the psychotherapy conditions. However, 43% of participants in the control conditions and 48% of people in the care-as-usual conditions no longer met criteria for MDD, suggesting that the additional value of psychotherapy compared to care-as-usual would be 14%. For response and remission, comparable results were found, with less than half of the patients meeting criteria for response and remission after psychotherapy. Additionally, a considerable proportion of response and remission was also found in control conditions. In the psychotherapy conditions, scores on the BDI were reduced by 13.42 points, 15.12 points on the BDI-II, and 10.28 points on the HAM-D. In the control conditions, these reductions were 4.56, 4.68, and 5.29. **DISCUSSION:** Psychotherapy contributes to improvement in depressed patients, but improvement in control conditions is also considerable.

Finzi, E. and N. E. Rosenthal (2014). **"Treatment of depression with onabotulinumtoxinA: A randomized, double-blind, placebo controlled trial."** *Journal of Psychiatric Research* 52: 1-6. <http://linkinghub.elsevier.com/retrieve/pii/S0022395613003567?showall=true>

Converging lines of evidence suggest a role for facial expressions in the pathophysiology and treatment of mood disorders. To determine the antidepressant effect of onabotulinumtoxinA (OBA) treatment of corrugator and procerus muscles in people with major depressive disorder, we conducted a double blind, randomized, placebo-controlled trial. In an outpatient clinical research center, eighty-five subjects with DSM-IV major depression were randomized to receive either OBA (29 units for females and 40 units for males) or saline injections into corrugator and procerus frown muscles (74 subjects were entered into the analysis). Subjects were rated at screening, and 3 and 6 weeks after OBA treatment. The primary outcome measure was the response rate, as defined by $\geq 50\%$ decrease in score on the Montgomery-Asberg Depression Rating Scale (MADRS). Response rates at 6 weeks from the date of injection were 52% and 15% in the OBA and placebo groups, respectively (Chi-Square (1) = 11.2, $p < 0.001$, Fisher $p < 0.001$). The secondary outcome measure of remission rate (MADRS score of 10 or less) was 27% with OBA and 7% with placebo (Chi-square (1) = 5.1, $p < 0.02$, Fisher $p < 0.03$). Six weeks after a single treatment, MADRS scores of subjects were reduced on average by 47% in those given OBA, and by 21% in those given placebo (Mann-Whitney U, $p < 0.0005$). In conclusion, a single treatment with OBA to the corrugator and procerus muscles appears to induce a significant and sustained antidepressant effect in patients with major depression.

Freeman, E. W., M. D. Sammel, et al. (2014). **"Longitudinal pattern of depressive symptoms around natural menopause."** *JAMA Psychiatry* 71(1): 36-43. <http://www.ncbi.nlm.nih.gov/pubmed/24227182>

IMPORTANCE: An increased risk of depressive symptoms has been associated with the transition to menopause, but the risk of depressive symptoms in the early postmenopausal years has not been well characterized. **OBJECTIVES:** To identify within-woman changes in depressive symptoms during a 14-year period around menopause, determine associations of a history of depression with the pattern of depressive symptoms, and evaluate the rate of change in reproductive hormones as predictors of depressive symptoms following menopause. **DESIGN, SETTING, AND PARTICIPANTS:** A randomly identified, population-based sample in Philadelphia County, Pennsylvania, of 203 late-reproductive-age women who were premenopausal at baseline and reached natural menopause. **MAIN OUTCOMES AND MEASURES:** Center for Epidemiologic Studies Depression Scale. **RESULTS:** The prevalence of high scores on the Center for Epidemiologic Studies Depression Scale decreased from 10 years before to 8 years after the final menstrual period (FMP), with a decrease of approximately 15% of baseline per year (odds ratio, 0.85; 95% CI, 0.81-0.89; $P < .001$). Relative to the FMP, the risk of depressive symptoms was higher in the years before and lower in the years after the FMP. Among women with a history of depression, the likelihood of depressive symptoms was more than 13 times greater overall and 8 times greater after menopause compared with women with no depression history. Among women who first experienced depressive symptoms approaching menopause, the risk of depressive symptoms declined after the FMP, with a significantly lower risk the second year after menopause. The risk of depressive symptoms after menopause decreased by 35% for each unit (SD) increase before the FMP in the log rate of change of follicle-stimulating hormone (odds ratio, 0.65; 95% CI, 0.46-0.91; $P = .01$). **CONCLUSIONS AND RELEVANCE:** The FMP was pivotal in the overall pattern of decreasing depressive symptoms in midlife women, with higher risk before and lower risk after the FMP. A history of depression strongly increased the risk both before and after menopause. Women who had no history of depression before the menopause transition had a low risk of depressive symptoms 2 or more years after the FMP.

Gerrits, M., P. van Oppen, et al. (2014). **"Pain, not chronic disease, is associated with the recurrence of depressive and anxiety disorders."** *BMC Psychiatry* 14(1): 187. <http://www.biomedcentral.com/1471-244X/14/187>

(Available in free full text) **BACKGROUND:** Studies suggest that poor physical health might be associated with increased depression and anxiety recurrence. The objectives of this study were to determine whether specific chronic diseases and pain characteristics are associated with depression and anxiety recurrence and to examine whether such associations are mediated by subthreshold depressive or anxiety symptoms. **METHODS:** 1122 individuals with remitted depressive or anxiety disorder (Netherlands Study of Depression and Anxiety) were followed up for a period of four years. The impact of specific chronic diseases and pain characteristics on recurrence was assessed using Cox regression and mediation analyses. **RESULTS:** Chronic diseases were not associated with recurrence. Neck (HR 1.45, $p < .01$), chest (HR 1.65, $p < .01$), abdominal (HR 1.52, $p < .01$) pain, an increase in the number of pain locations (HR 1.10, $p < .01$) and pain severity (HR 1.18, $p = .01$) were associated with an increased risk of depression recurrence but not anxiety. Subthreshold depressive symptoms mediated the associations between pain and depression recurrence. **CONCLUSIONS:** Pain, not chronic disease, increases the likelihood of depression recurrence, largely through its association with aggravated subthreshold depressive symptoms. These findings support the idea of the existence of a mutually reinforcing mechanism between pain and depression and are indicative of the importance of shedding light on neurobiological links in order to optimize pain and depression management.

Hollon, S. D., R. J. DeRubeis, et al. (2014). **"Effect of cognitive therapy with antidepressant medications vs antidepressants alone on the rate of recovery in major depressive disorder: A randomized clinical trial."** *JAMA Psychiatry*. <http://dx.doi.org/10.1001/jamapsychiatry.2014.1054>

Importance Antidepressant medication (ADM) is efficacious in the treatment of depression, but not all patients achieve remission and fewer still achieve recovery with ADM alone. **Objective** To determine the effects of combining cognitive therapy (CT) with ADM vs ADM alone on remission and recovery in major depressive disorder (MDD). **Design, Setting, and Participants** A total of 452 adult outpatients with chronic or recurrent MDD participated in a trial conducted in research clinics at 3 university medical centers in the United States. The patients were randomly assigned to ADM treatment alone or CT combined with ADM treatment. Treatment was continued for up to 42 months until recovery was achieved. **Interventions** Antidepressant medication with or without CT. **Main Outcomes and Measures** Blind evaluations of recovery with a modified version of the 17-item Hamilton Rating Scale for Depression and the Longitudinal Interval Follow-up Evaluation. **Results** Combined treatment enhanced the rate of recovery vs treatment with ADM alone (72.6% vs 62.5%; $t_{451} = 2.45$; $P = .01$; hazard ratio [HR], 1.33; 95% CI, 1.06-1.68; number needed to treat [NNT], 10; 95% CI, 5-72). This effect was conditioned on interactions with severity ($t_{451} = 1.97$; $P = .05$; NNT, 5) and chronicity ($\chi^2 = 7.46$; $P = .02$; NNT, 6) such that the advantage for combined treatment was limited to patients with severe, nonchronic MDD (81.3% vs 51.7%; $n = 146$; $t_{145} = 3.96$; $P = .001$; HR, 2.34; 95% CI, 1.54-3.57; NNT, 3; 95% CI, 2-5). Fewer patients dropped out of combined treatment vs ADM treatment alone (18.9% vs 26.8%; $t_{451} = -2.04$; $P = .04$; HR, 0.66; 95% CI, 0.45-0.98). Remission rates did not differ significantly either as a main effect of treatment or as an interaction with severity or chronicity. Patients with comorbid Axis II disorders took longer to recover than did patients without comorbid Axis II disorders regardless of the condition ($P = .01$). Patients who received combined treatment reported fewer serious adverse events than did patients who received ADMs alone (49 vs 71; $P = .02$), largely because they experienced less time in an MDD episode. **Conclusions and Relevance** Cognitive therapy combined with ADM treatment enhances the rates of recovery from MDD relative to ADMs alone, with the effect limited to patients with severe, nonchronic depression. **Trial Registration** clinicaltrials.gov Identifier: NCT00057577

Horrell, L., K. A. Goldsmith, et al. (2014). **"One-day cognitive-behavioural therapy self-confidence workshops for people with depression: Randomised controlled trial."** *The British Journal of Psychiatry* 204(3): 222-233. <http://bjp.rcpsych.org/content/204/3/222.abstract>

Background: Despite its high prevalence, help-seeking for depression is low. **Aims:** To assess the effectiveness and cost-effectiveness of 1-day cognitive-behavioural therapy (CBT) self-confidence workshops in reducing depression. Anxiety, self-esteem, prognostic indicators as well as access were also assessed. **Method:** An open randomised controlled trial (RCT) waiting list control design with 12-week follow-up was used (trial registration: ISRCTN26634837). A total of 459 adult participants with depression (Beck Depression Inventory (BDI) scores of ≥ 14) self-referred and 382 participants (83%) were followed up. **Results:** At follow-up, experimental and control participants differed significantly on the BDI, with an effect size of 0.55. Anxiety and self-esteem also differed. Of those who participated, 25% were GP non-consulters and 32% were from Black and minority ethnic groups. Women benefited more than men on depression scores. The intervention has a 90% chance of being considered cost-effective if a depression-free day is valued at £14. **Conclusions:** Self-confidence workshops appear promising in terms of clinical effectiveness, cost-effectiveness and access by difficult-to-engage groups.

Kemp, J. J., J. J. Lickel, et al. (2014). **"Effects of a chemical imbalance causal explanation on individuals' perceptions of their depressive symptoms."** *Behaviour Research and Therapy* 56(0): 47-52. <http://www.sciencedirect.com/science/article/pii/S0005796714000308>

Although the chemical imbalance theory is the dominant causal explanation of depression in the United States, little is known about the effects of this explanation on depressed individuals. This experiment examined the impact of chemical imbalance test feedback on perceptions of stigma, prognosis, negative mood regulation expectancies, and treatment credibility and expectancy. Participants endorsing a past or current depressive episode received results of a bogus but credible biological test demonstrating their depressive symptoms to be caused, or not caused, by a chemical imbalance in the brain. Results showed that chemical imbalance test feedback failed to reduce self-blame, elicited worse prognostic pessimism and negative mood regulation expectancies, and led participants to view pharmacotherapy as more credible and effective than psychotherapy. The present findings add to a growing literature highlighting the unhelpful and potentially iatrogenic effects of attributing depressive symptoms to a chemical imbalance. Clinical and societal implications of these findings are discussed.

Kendler, K. S. and S. H. Aggen (2014). **"Clarifying the causal relationship in women between childhood sexual abuse and lifetime major depression."** *Psychological Medicine* 44(06): 1213-1221. <http://dx.doi.org/10.1017/S0033291713001797>

Background Childhood sexual abuse (CSA) is strongly associated with risk for major depression (MD) but the degree to which this association is causal remains uncertain. **Method** We applied structural equation modeling using the Mplus program to 1493 longitudinally assessed female twins from the Virginia Adult Twin Study of Psychiatric and Substance Use Disorders. **Results** Our model included (i) retrospective self- and co-twin reports on CSA, (ii) major potentially confounding covariates, (iii) assessment of lifetime history of MD at two separate interviews, and (iv) mood-congruent recall (implemented by allowing current depressive symptoms to predict reporting of CSA). In a model with only measurement error, CSA explained 9.6% of MD. Including four key covariates reduced the variance explained to 5.3%, with the largest effects found for parental loss and low parental warmth. Adding the effect of mood-congruent recall to a final well-fitting model reduced the percentage of variance explained in lifetime MD (LTMD) by CSA to 4.4%. In this model, current depressive symptoms significantly predicted recall of

CSA. Conclusions In a model correcting for measurement error, confounding and the impact of mood-congruent recall, CSA remains substantially associated with the risk for LTMD in women. These findings strongly suggest, but do not prove, that this association is causal, and are consistent with previous results in this sample using a co-twin control design, but also indicate that more than half of the uncorrected CSA-MD association is probably not causal. Traumatic life experiences contribute substantially to the risk for LTMD.

Kendler, K. S. and C. O. Gardner (2014). **"Sex differences in the pathways to major depression: A study of opposite-sex twin pairs."** *Am J Psychiatry* 171(4): 426-435. <http://ajp.psychiatryonline.org/article.aspx?articleid=1831622>

OBJECTIVE The authors sought to clarify the nature of sex differences in the etiologic pathways to major depression. **METHOD** Retrospective and prospective assessments of 20 developmentally organized risk factors and the occurrence of past-year major depression were conducted at two waves of personal interviews at least 12 months apart in 1,057 opposite-sex dizygotic twin pairs from a population-based register. Analyses were conducted by structural modeling, examining within-pair differences. **RESULTS** Sixty percent of all paths in the best-fit model exhibited sex differences. Eleven of the 20 risk factors differed across sexes in their impact on liability to major depression. Five had a greater impact in women: parental warmth, neuroticism, divorce, social support, and marital satisfaction. Six had a greater impact in men: childhood sexual abuse, conduct disorder, drug abuse, prior history of major depression, and distal and dependent proximal stressful life events. The life event categories responsible for the stronger effect in males were financial, occupational, and legal in nature. **CONCLUSIONS** In a co-twin control design, which matches sisters and brothers on genetic and familial-environmental background, personality and failures in interpersonal relationships played a stronger etiologic role in major depression for women than for men. Externalizing psychopathology, prior depression, and specific "instrumental" classes of acute stressors were more important in the etiologic pathway to major depression for men. The results are consistent with previously proposed typologies of major depression that suggest two subtypes that differ in prevalence in women (deficiencies in caring relationships and interpersonal loss) and men (failures to achieve expected goals, with lowered self-worth).

Lai, J. S., S. Hiles, et al. (2014). **"A systematic review and meta-analysis of dietary patterns and depression in community-dwelling adults."** *The American Journal of Clinical Nutrition* 99(1): 181-197.

<http://ajcn.nutrition.org/content/99/1/181.abstract>

Background: Studies of single nutrients on depression have produced inconsistent results, and they have failed to consider the complex interactions between nutrients. An increasing number of studies in recent years are investigating the association of overall dietary patterns and depression. **Objective:** This study aimed to systematically review current literature and conduct meta-analyses of studies addressing the association between dietary patterns and depression. **Design:** Six electronic databases were searched for articles published up to August 2013 that examined the association of total diet and depression among adults. Only studies considered methodologically rigorous were included. Two independent reviewers completed study selection, quality rating, and data extraction. Effect sizes of eligible studies were pooled by using random-effects models. A summary of the findings was presented for studies that could not be meta-analyzed. **Results:** A total of 21 studies were identified. Results from 13 observational studies were pooled. Two dietary patterns were identified. The healthy diet pattern was significantly associated with a reduced odds of depression (OR: 0.84; 95% CI: 0.76, 0.92; $P < 0.001$). No statistically significant association was observed between the Western diet and depression (OR: 1.17; 95% CI: 0.97, 1.68; $P = 0.094$); however, the studies were too few for a precise estimate of this effect. **Conclusions:** The results suggest that high intakes of fruit, vegetables, fish, and whole grains may be associated with a reduced depression risk. However, more high-quality randomized controlled trials and cohort studies are needed to confirm this finding, specifically the temporal sequence of this association.

Lapidus, K., C. Levitch, et al. (2014). **"A randomized controlled trial of intranasal ketamine in major depressive disorder"** *Biological Psychiatry*. [http://www.biologicalpsychiatryjournal.com/article/S0006-3223\(14\)00227-3/abstract](http://www.biologicalpsychiatryjournal.com/article/S0006-3223(14)00227-3/abstract)

Background: The N-methyl-D-aspartate glutamate receptor antagonist ketamine, delivered via an intravenous route, has shown rapid antidepressant effects in patients with treatment-resistant depression. The current study was designed to test the safety, tolerability and efficacy of intranasal ketamine in patients with depression who had failed at least one prior antidepressant trial. **Methods:** Twenty patients with major depression were randomized and 18 completed two treatment days with intranasal ketamine hydrochloride (50 mg) or saline solution in a randomized, double-blind, crossover study. The primary efficacy outcome measure was change in depression severity 24 hours following ketamine or placebo, measured using the Montgomery-Asberg Depression Rating Scale. Secondary outcomes included persistence of benefit, changes in self-reports of depression, changes in anxiety, and proportion of responders. Potential psychotomimetic, dissociative, hemodynamic, and general adverse effects associated with ketamine were also measured. **Results:** Patients showed significant improvement in depressive symptoms at 24 hours following ketamine compared to placebo [$t=4.39$, $p<0.001$; estimated mean MADRS score difference of 7.6 ± 3.7 (95% CI: 3.9 – 11.3)]. Eight of 18 patients (44%) met response criteria 24 hours following ketamine administration, compared to 1 of 18 (6%) following placebo ($p=0.033$). Intranasal ketamine was well tolerated with minimal psychotomimetic or dissociative effects and was not associated with clinically significant changes in hemodynamic parameters. **Conclusions:** This study provides the first controlled evidence for the rapid antidepressant effects of intranasal ketamine. Treatment was associated with minimal adverse effects. If replicated, these findings may lead to novel approaches to the pharmacologic treatment of patients with major depression.

Menchetti, M., P. Rucci, et al. (2014). **"Moderators of remission with interpersonal counselling or drug treatment in primary care patients with depression: Randomised controlled trial."** *The British Journal of Psychiatry* 204(2): 144-150. <http://bjp.rcpsych.org/content/204/2/144.abstract>

Background: Despite depressive disorders being very common there has been little research to guide primary care physicians on the choice of treatment for patients with mild to moderate depression. **Aims** To evaluate the efficacy of interpersonal counselling compared with selective serotonin reuptake inhibitors (SSRIs), in primary care attenders with major depression and to identify moderators of treatment outcome. **Method** A randomised controlled trial in nine centres (DEPICS, Australian New Zealand Clinical Trials Registry number: ACTRN12608000479303). The primary outcome was remission of the depressive episode (defined as a Hamilton Rating Scale for Depression score ≤ 7 at 2 months). Daily functioning was assessed using the Work and Social Adjustment Scale. Logistic regression models were used to identify moderators of treatment outcome. **Results** The percentage of patients who achieved remission at 2 months was significantly higher in the interpersonal counselling group compared with the SSRI group (58.7% v. 45.1%, $P = 0.021$). Five moderators of treatment outcome were found: depression severity, functional impairment, anxiety comorbidity, previous depressive episodes and smoking habit. **Conclusions** We identified some patient characteristics predicting a differential outcome with pharmacological and psychological interventions. Should our results be confirmed in future studies, these characteristics will help clinicians to define criteria for first-line treatment of depression targeted to patients' characteristics.

O'Mahen, H. A., D. A. Richards, et al. (2014). "**Netmums: A phase ii randomized controlled trial of a guided internet behavioural activation treatment for postpartum depression.**" *Psychological Medicine* 44(08): 1675-1689.
<http://dx.doi.org/10.1017/S0033291713002092>

(Available in free full text) Background Despite the high prevalence of postnatal depression (PND), few women seek help. Internet interventions may overcome many of the barriers to PND treatment use. We report a phase II evaluation of a 12-session, modular, guided Internet behavioural activation (BA) treatment modified to address postnatal-specific concerns [Netmums Helping With Depression (NetmumsHWD)]. Method To assess feasibility, we measured recruitment and attrition to the trial and examined telephone session support and treatment adherence. We investigated sociodemographic and psychological predictors of treatment adherence. Effectiveness outcomes were estimated with the Edinburgh Postnatal Depression Scale (EPDS), Generalized Anxiety Disorder-7, Work and Social Adjustment Scale, Postnatal Bonding Questionnaire, and Social Provisions Scale. Results A total of 249 women were recruited via a UK parenting site, Netmums.com. A total of 83 women meeting DSM-IV criteria for major depressive disorder were randomized to NetmumsHWD (n = 41) or treatment-as-usual (TAU; n = 42). Of the 83 women, 71 (86%) completed the EPDS at post-treatment, and 71% (59/83) at the 6-month follow-up. Women completed an average of eight out of 12 telephone support sessions and five out of 12 modules. Working women and those with less support completed fewer modules. There was a large effect size favouring women who received NetmumsHWD on depression, work and social impairment, and anxiety scores at post-treatment compared with women in the TAU group, and a large effect size on depression at 6 months post-treatment. There were small effect sizes for postnatal bonding and perceived social support. Conclusions A supported, modular, Internet BA programme can be feasibly delivered to postpartum women, offering promise to improve depression, anxiety and functioning.

Radkovsky, A., J. J. McArdle, et al. (2014). "**Successful emotion regulation skills application predicts subsequent reduction of symptom severity during treatment of major depressive disorder.**" *J Consult Clin Psycho* 82(2): 248-262.
<http://www.ncbi.nlm.nih.gov/pubmed/24564219>

OBJECTIVE: Deficits in emotion regulation (ER) skills are considered a putative maintaining factor for major depressive disorder (MDD) and hence a promising target in the treatment of MDD. However, to date, the association between the successful application of arguably adaptive ER skills and changes in depressive symptom severity (DSS) has yet to be investigated over the course of treatment. Thus, the primary aim of this study was to clarify reciprocal prospective associations between successful ER skills application and DSS over the course of inpatient cognitive behavioral therapy for MDD. Additionally, we explored whether such associations would differ across specific ER skills. METHOD: We assessed successful ER skills application and DSS 4 times during the first 3 weeks of treatment in 152 inpatients (62.5% women, average age 45.6 years) meeting criteria for MDD. We first tested whether successful skills application and depression were cross-sectionally associated by computing Pearson's correlations. Then, we utilized latent curve modeling to test whether changes in successful skills application were negatively associated with changes in DSS during treatment. Finally, we used latent change score models to clarify whether successful skills application would predict subsequent reduction of DSS. RESULTS: Cross-sectionally, successful ER skills application was associated with lower levels of DSS at all assessment times, and an increase of successful skills application during treatment was associated with a decrease of DSS. Moreover, successful overall ER skills application predicted subsequent changes in DSS (but not vice versa). Finally, strength of associations between successful application and DSS differed across specific ER skills. Among a broad range of potentially adaptive skills, only the abilities to tolerate negative emotions and to actively modify undesired emotions were significantly associated with subsequent improvement in DSS. CONCLUSIONS: Systematically enhancing health-relevant ER skills with specific interventions may help reduce DSS in patients suffering from MDD.

Sarris, J., A. O'Neil, et al. (2014). "**Lifestyle medicine for depression.**" *BMC Psychiatry* 14(1): 107.
<http://www.biomedcentral.com/1471-244X/14/107>

(Free full text available) The prevalence of depression appears to have increased over the past three decades. While this may be an artefact of diagnostic practices, it is likely that there are factors about modernity that are contributing to this rise. There is now compelling evidence that a range of lifestyle factors are involved in the pathogenesis of depression. Many of these factors can potentially be modified, yet they receive little consideration in the contemporary treatment of depression, where medication and psychological intervention remain the first line treatments. "Lifestyle Medicine" provides a nexus between public health promotion and clinical treatments, involving the application of environmental, behavioural, and psychological principles to enhance physical and mental wellbeing. This may also provide opportunities for general health promotion and potential prevention of depression. In this paper we provide a narrative discussion of the major components of Lifestyle Medicine, consisting of the evidence-based adoption of physical activity or exercise, dietary modification, adequate relaxation/sleep and social interaction, use of mindfulness-based meditation techniques, and the reduction of recreational substances such as nicotine, drugs, and alcohol. We also discuss other potential lifestyle factors that have a more nascent evidence base, such as environmental issues (e.g. urbanisation, and exposure to air, water, noise, and chemical pollution), and the increasing human interface with technology. Clinical considerations are also outlined. While data supports that some of these individual elements are modifiers of overall mental health, and in many cases depression, rigorous research needs to address the long-term application of Lifestyle Medicine for depression prevention and management. Critically, studies exploring lifestyle modification involving multiple lifestyle elements are needed. While the judicious use of medication and psychological techniques are still advocated, due to the complexity of human illness/wellbeing, the emerging evidence encourages a more integrative approach for depression, and an acknowledgment that lifestyle modification should be a routine part of treatment and preventative efforts.

Shaffer, J. A., D. Edmondson, et al. (2014). "**Vitamin d supplementation for depressive symptoms: A systematic review and meta-analysis of randomized controlled trials.**" *Psychosomatic Medicine* 76(3): 190-196
110.1097/PSY.0000000000000044.

http://journals.lww.com/psychosomaticmedicine/Fulltext/2014/04000/Vitamin_D_Supplementation_for_Depressive_Symptoms_9.aspx

Objective: The aim of this study was to review the effects of vitamin D supplementation on depressive symptoms in randomized controlled trials. Although low vitamin D levels have been observationally associated with depressive symptoms, the effect of vitamin D supplementation as an antidepressant remains uncertain. Methods: MEDLINE, CINAHL, AMED, PsycINFO, Scopus, The Cochrane Library, and references of included reports (through May 2013) were searched. Two independent reviewers identified and extracted data from randomized trials that compared the effect of vitamin D supplementation on depressive symptoms to a control condition. Two additional reviewers assessed study quality using The Cochrane Risk of Bias Tool. Seven trials (3191 participants) were included. Results: Vitamin D supplementation had no overall effect on depressive symptoms (standardized mean difference [SMD], 0.14; 95% confidence interval [CI], -0.33 to 0.05, p = .16), although considerable heterogeneity was observed. Subgroup analysis showed that vitamin D supplementation for participants with clinically significant depressive symptoms or depressive disorder had a moderate, statistically significant effect (2 studies: SMD,

-0.60; 95% CI, -1.19 to -0.01; $p = .046$), but a small, nonsignificant effect for those without clinically significant depression (5 studies: SMD, -0.04; 95% CI, -0.20 to 0.12; $p = .61$). Most trials had unclear or high risk of bias. Studies varied in the amount, frequency, duration, and mode of delivery of vitamin D supplementation. Conclusions: Vitamin D supplementation may be effective for reducing depressive symptoms in patients with clinically significant depression; however, further high-quality research is needed.

Shahab, L., S. Andrew, et al. (2014). **"Changes in prevalence of depression and anxiety following smoking cessation: Results from an international cohort study (attempt)."** *Psychological Medicine* 44(01): 127-141. <http://dx.doi.org/10.1017/S0033291713000391>

Background Smoking cessation improves physical health but it has been suggested that in vulnerable individuals it may worsen mental health. This study aimed to identify the short- and longer-term effects of stopping smoking on depression and anxiety in the general population and in those with a history of these disorders. Method Sociodemographic and smoking characteristics, and mental and physical health were assessed using established measures in the ATTEMPT cohort, an international longitudinal study of smokers ($n = 3645$). Smokers who had stopped for at least 3 months or less than 3 months at the 12-month follow-up were compared with current smokers ($n = 1640$). Results At follow-up, 9.7% [95% confidence interval (CI) 8.3–11.2] of smokers had stopped for less than 3 months and 7.5% (95% CI 6.3–8.9) for at least 3 months. Compared with current smokers, prevalence of depression prescriptions obtained in the last 2 weeks was lower for those who had stopped for less than 3 months [odds ratio (OR) 0.37, 95% CI 0.14–0.96] or at least 3 months (OR 0.25, 95% CI 0.06–0.94) after adjusting for baseline prescription levels and confounding variables. Adjusted prevalence of recent depression symptoms was also lower for ex-smokers who had stopped for less than 3 months (OR 0.34, 95% CI 0.15–0.78) or at least 3 months (OR 0.24, 95% CI 0.09–0.67) than among continuing smokers. There was no change in anxiety measures in the general population or any increase in anxiety or depression symptoms in ex-smokers with a past history of these conditions. Conclusions Smoking cessation does not appear to be associated with an increase in anxiety or depression and may lead to a reduced incidence of depression.

Stahl, S. T., S. M. Albert, et al. (2014). **"Coaching in healthy dietary practices in at-risk older adults: A case of indicated depression prevention."** *Am J Psychiatry* 171(5): 499-505. <http://ajp.psychiatryonline.org/article.aspx?articleid=1866171>

Prevention of major depressive disorder is important because current treatments are only partially adequate in reducing symptom burden and promoting health-related quality of life. Lifestyle interventions may be a desirable prevention strategy for reasons of patient preference, particularly among older patients from minority groups. Using evidence from a randomized depression prevention trial for older adults, the authors found that coaching in healthy dietary practices was potentially effective in protecting at-risk older adults from developing incident episodes of major depression. The authors describe the dietary coaching program (highlighted in a case example) as well as the feasibility and potential efficacy of the program within the context of evidence-based interventions for preventing episodes of major depression and mitigating symptoms of depression. Older adults receiving dietary coaching experienced a low incidence of major depressive episodes and exhibited a 40%-50% decrease in depressive symptoms, as well as enhanced well-being, during the initial 6-week intervention; these gains were sustained over 2 years. The authors also describe why lifestyle interventions like coaching in healthy dietary practices may hold promise as effective, practical, nonstigmatizing interventions for preventing episodes of major depressive disorder in older adults with subsyndromal depressive symptoms.

Takizawa, R., B. Maughan, et al. (2014). **"Adult health outcomes of childhood bullying victimization: Evidence from a five-decade longitudinal british birth cohort."** *American Journal of Psychiatry* 171(7): 777-784. <http://dx.doi.org/10.1176/appi.ajp.2014.13101401>

Objective The authors examined midlife outcomes of childhood bullying victimization. Method Data were from the British National Child Development Study, a 50-year prospective cohort of births in 1 week in 1958. The authors conducted ordinal logistic and linear regressions on data from 7,771 participants whose parents reported bullying exposure at ages 7 and 11 years, and who participated in follow-up assessments between ages 23 and 50 years. Outcomes included suicidality and diagnoses of depression, anxiety disorders, and alcohol dependence at age 45; psychological distress and general health at ages 23 and 50; and cognitive functioning, socioeconomic status, social relationships, and well-being at age 50. Results Participants who were bullied in childhood had increased levels of psychological distress at ages 23 and 50. Victims of frequent bullying had higher rates of depression (odds ratio=1.95, 95% CI=1.27–2.99), anxiety disorders (odds ratio=1.65, 95% CI=1.25–2.18), and suicidality (odds ratio=2.21, 95% CI=1.47–3.31) than their nonvictimized peers. The effects were similar to those of being placed in public or substitute care and an index of multiple childhood adversities, and the effects remained significant after controlling for known correlates of bullying victimization. Childhood bullying victimization was associated with a lack of social relationships, economic hardship, and poor perceived quality of life at age 50. Conclusions Children who are bullied—and especially those who are frequently bullied—continue to be at risk for a wide range of poor social, health, and economic outcomes nearly four decades after exposure. Interventions need to reduce bullying exposure in childhood and minimize long-term effects on victims' well-being; such interventions should cast light on causal processes.

Tan, L., M.-J. Wang, et al. (2014). **"Preventing the development of depression at work: A systematic review and meta-analysis of universal interventions in the workplace."** *BMC Medicine* 12(1): 74. <http://www.biomedcentral.com/1741-7015/12/74>

(Free full text available) BACKGROUND: Depression is a major public health problem among working-age adults. The workplace is potentially an important location for interventions aimed at preventing the development of depression, but to date, the mental health impact of universal interventions in the workplace has been unclear. METHOD: A systematic search was conducted in relevant databases to identify randomized controlled trials of workplace interventions aimed at universal prevention of depression. The quality of studies was assessed using the Downs and Black checklist. A meta-analysis was performed using results from studies of adequate methodological quality, with pooled effect size estimates obtained from a random effects model. RESULTS: Nine workplace-based randomized controlled trials (RCT) were identified. The majority of the included studies utilized cognitive behavioral therapy (CBT) techniques. The overall standardized mean difference (SMD) between the intervention and control groups was 0.16 (95% confidence interval (CI): 0.07, 0.24, $P=0.0002$), indicating a small positive effect. A separate analysis using only CBT-based interventions yielded a significant SMD of 0.12 (95% CI: 0.02, 0.22, $P=0.01$). CONCLUSIONS: There is good quality evidence that universally delivered workplace mental health interventions can reduce the level of depression symptoms among workers. There is more evidence for the effectiveness of CBT-based programs than other interventions. Evidence-based workplace interventions should be a key component of efforts to prevent the development of depression among adults.

Taylor, G., A. McNeill, et al. (2014). **"Change in mental health after smoking cessation: Systematic review and meta-analysis."** *BMJ* 348: g1151. <http://www.bmj.com/content/348/bmj.g1151?etoc=>

(Available in free full text) **OBJECTIVE:** To investigate change in mental health after smoking cessation compared with continuing to smoke. **DESIGN:** Systematic review and meta-analysis of observational studies. **DATA SOURCES:** Web of Science, Cochrane Central Register of Controlled Trials, Medline, Embase, and PsycINFO for relevant studies from inception to April 2012. Reference lists of included studies were hand searched, and authors were contacted when insufficient data were reported. **ELIGIBILITY CRITERIA FOR SELECTING STUDIES:** Longitudinal studies of adults that assessed mental health before smoking cessation and at least six weeks after cessation or baseline in healthy and clinical populations. **RESULTS:** 26 studies that assessed mental health with questionnaires designed to measure anxiety, depression, mixed anxiety and depression, psychological quality of life, positive affect, and stress were included. Follow-up mental health scores were measured between seven weeks and nine years after baseline. Anxiety, depression, mixed anxiety and depression, and stress significantly decreased between baseline and follow-up in quitters compared with continuing smokers: the standardised mean differences (95% confidence intervals) were anxiety -0.37 (95% confidence interval -0.70 to -0.03); depression -0.25 (-0.37 to -0.12); mixed anxiety and depression -0.31 (-0.47 to -0.14); stress -0.27 (-0.40 to -0.13). Both psychological quality of life and positive affect significantly increased between baseline and follow-up in quitters compared with continuing smokers 0.22 (0.09 to 0.36) and 0.40 (0.09 to 0.71), respectively). There was no evidence that the effect size differed between the general population and populations with physical or psychiatric disorders. **CONCLUSIONS:** Smoking cessation is associated with reduced depression, anxiety, and stress and improved positive mood and quality of life compared with continuing to smoke. The effect size seems as large for those with psychiatric disorders as those without. The effect sizes are equal or larger than those of antidepressant treatment for mood and anxiety disorders.

Unlu Ince, B., H. Riper, et al. (2014). **"The effects of psychotherapy on depression among racial-ethnic minority groups: A metaregression analysis."** *Psychiatr Serv* 65(5): 612-617. <http://ps.psychiatryonline.org/article.aspx?articleid=1831969>

OBJECTIVE Several psychotherapies have been found to be effective in the treatment of depression among adults. However, little is known about whether effectiveness differs by racial-ethnic minority group. The authors conducted a meta-analysis to assess the relative effects of psychotherapy for persons from racial-ethnic minority groups, by examining whether a sample's racial-ethnic minority proportion was a moderator of the effect size of psychotherapy. **METHODS** Eligible studies were identified with an existing database of randomized controlled trials (RCTs) on the psychological treatment of depression among adults. The analysis included all studies in which the effect of psychotherapy for adults with a depressive disorder or symptomatology was compared with a control condition in an RCT. Only studies that reported the overall racial-ethnic minority proportion of the sample or the studies reporting specific racial-ethnic backgrounds of participants were included. A total of 56 RCTs reported the proportion of participants from racial-ethnic minority groups (with 77 comparisons between psychotherapy treatment and control groups). **RESULTS** An overall moderate effect size ($g = .50$) in favor of psychotherapy was found. No significant moderating effect of race-ethnicity was found in bivariate and multivariate analyses. **CONCLUSIONS** Results suggest that psychotherapy is equally effective regardless of care seekers' race-ethnicity. Future research should focus on filling in the gap between effective mental health care and the delivery of these services.

van Zoonen, K., C. Buntrock, et al. (2014). **"Preventing the onset of major depressive disorder: A meta-analytic review of psychological interventions."** *International Journal of Epidemiology* 43(2): 318-329. <http://ije.oxfordjournals.org/content/43/2/318.abstract>

Background Depressive disorders are highly prevalent, have a detrimental impact on the quality of life of patients and their relatives and are associated with increased mortality rates, high levels of service use and substantial economic costs. Current treatments are estimated to only reduce about one-third of the disease burden of depressive disorders. Prevention may be an alternative strategy to further reduce the disease burden of depression. **Methods** We conducted a meta-analysis of randomized controlled trials examining the effects of preventive interventions in participants with no diagnosed depression at baseline on the incidence of diagnosed depressive disorders at follow-up. We identified 32 studies that met our inclusion criteria. **Results** We found that the relative risk of developing a depressive disorder was incidence rate ratio = 0.79 (95% confidence interval: 0.69-0.91), indicating a 21% decrease in incidence in prevention groups in comparison with control groups. Heterogeneity was low ($I^2 = 24%$). The number needed to treat (NNT) to prevent one new case of depressive disorder was 20. Sensitivity analyses revealed no differences between type of prevention (e.g. selective, indicated or universal) nor between type of intervention (e.g. cognitive behavioural therapy, interpersonal psychotherapy or other). However, data on NNT did show differences. **Conclusions** Prevention of depression seems feasible and may, in addition to treatment, be an effective way to delay or prevent the onset of depressive disorders. Preventing or delaying these disorders may contribute to the further reduction of the disease burden and the economic costs associated with depressive disorders.

Wang, Y. P., Y. T. Chen, et al. (2014). **"Short-term use of serotonin reuptake inhibitors and risk of upper gastrointestinal bleeding."** *Am J Psychiatry* 171(1): 54-61. <http://ajp.psychiatryonline.org/article.aspx?articleid=1738031>

OBJECTIVE: The association between selective serotonin receptor inhibitors (SSRIs) and risk of upper gastrointestinal bleeding remains controversial. Previous studies have generally evaluated the issue for approximately 3 months, even though the SSRI-mediated inhibition of platelet serotonin concentrations occurs within 7-14 days. The authors explored the risk of upper gastrointestinal bleeding after short-term SSRI exposure by a case-crossover design. **METHOD:** The records of psychiatric inpatients with upper gastrointestinal bleeding were retrieved from the Taiwan National Health Insurance Database (1998-2009). Rates of antidepressant use were compared for case and control periods with time windows of 7, 14, and 28 days. The adjusted self-matched odds ratios from a conditional logistic regression model were used to determine the association between SSRI use and upper gastrointestinal bleeding. **RESULTS:** A total of 5,377 patients with upper gastrointestinal bleeding were enrolled. The adjusted odds ratio for the risk of upper gastrointestinal bleeding after SSRI exposure was 1.67 (95% CI=1.23-2.26) for the 7-day window, 1.84 (95% CI=1.42-2.40) for the 14-day window, and 1.67 (95% CI=1.34-2.08) for the 28-day window. SSRIs with high and intermediate, but not low, affinity for serotonin transporter were associated with upper gastrointestinal bleeding. An elevated risk of upper gastrointestinal bleeding after SSRI exposure was seen in male but not female patients. **CONCLUSIONS:** Short-term SSRI use (7-28 days) is significantly associated with upper gastrointestinal bleeding. Gender differences may exist in the relationship between SSRI use and upper gastrointestinal bleeding. Physicians should carefully monitor signs of upper gastrointestinal bleeding even after short-term exposure to SSRIs, as is done with nonsteroidal anti-inflammatory drugs and aspirin.

Weissman, M. M. (2014). **"Treatment of depression: Men and women are different?"** *Am J Psychiatry* 171(4): 384-387. <http://ajp.psychiatryonline.org/article.aspx?articleid=1853439>

(Available in free full text) Using data from more than 1,000 twins from the vast birth-certificate-based Virginia Twin Registry of individuals born between 1940 and 1974, and assessing them with personal interviews at least 1 year apart, Kendler

and Gardner (1) have produced insights into psychosocial risk factors for women and men with major depression. The risk factors that had the greatest impact on liability to major depression in women were neuroticism, divorce, and absence of parental warmth, social supports, and marital satisfaction. For men, they were childhood sexual abuse, conduct disorder, drug abuse, prior history of major depression, and financial, occupational, and legal stressful life events. Matching between twin brothers and sisters on genetic and familial environmental background (the nature of the twin design), the authors conclude that women's depressions are defined by deficiencies in caring relationships and interpersonal loss and men's by failure to achieve expected instrumental goals and lowered self-worth. At first glance, the results seem to fulfill sexist stereotypes. Maybe the results are due to where the study was carried out (in Virginia, a state with large rural areas), or to the older age range of the sample (39 to 73 years), or to the lack of racial diversity in the all-Caucasian sample. There are few possibilities for replicating these findings in samples of different composition. If the findings generalize to younger birth cohorts and diverse samples, these differences might make a difference in treatment. Understanding of gender differences in psychosocial risk could contribute to the search for personalized treatment ... The implication of different risk factors for men and women remain elusive, as do the depressed men recruited for many of these studies. For all patients, and especially those with young children, the urgency of a prompt, rapid, and sustained remission, whether by medication or psychotherapy or both, to benefit the patients and their children is obvious. Recent efforts to develop targeted personalized treatment should help eventually to speed remission. Biomarkers, not psychosocial risk factors, may have more of a chance of personalizing treatment to achieve remission. Until that happens—and even if it does—patient-centered treatment using medication and/or psychotherapy that explores the psychosocial context of depression is likely to give the best chance of patient compliance and satisfaction, regardless of gender. Kendler and Gardner's findings remind us that women and men may become depressed in different contexts. These different risks offer a road map for clinicians in their formulation of the psychological issues important to the patients they treat.

Williams, J. M., C. Crane, et al. (2014). **"Mindfulness-based cognitive therapy for preventing relapse in recurrent depression: A randomized dismantling trial."** *J Consult Clin Psychol* 82(2): 275-286.

<http://psycnet.apa.org/index.cfm?fa=browsePA.volumes&jcode=ccp>

(Available in free full text) OBJECTIVE: We compared mindfulness-based cognitive therapy (MBCT) with both cognitive psychological education (CPE) and treatment as usual (TAU) in preventing relapse to major depressive disorder (MDD) in people currently in remission following at least 3 previous episodes. METHOD: A randomized controlled trial in which 274 participants were allocated in the ratio 2:2:1 to MBCT plus TAU, CPE plus TAU, and TAU alone, and data were analyzed for the 255 (93%; MBCT = 99, CPE = 103, TAU = 53) retained to follow-up. MBCT was delivered in accordance with its published manual, modified to address suicidal cognitions; CPE was modeled on MBCT, but without training in meditation. Both treatments were delivered through 8 weekly classes. RESULTS: Allocated treatment had no significant effect on risk of relapse to MDD over 12 months follow-up, hazard ratio for MBCT vs. CPE = 0.88, 95% CI [0.58, 1.35]; for MBCT vs. TAU = 0.69, 95% CI [0.42, 1.12]. However, severity of childhood trauma affected relapse, hazard ratio for increase of 1 standard deviation = 1.26 (95% CI [1.05, 1.50]), and significantly interacted with allocated treatment. Among participants above median severity, the hazard ratio was 0.61, 95% CI [0.34, 1.09], for MBCT vs. CPE, and 0.43, 95% CI [0.22, 0.87], for MBCT vs. TAU. For those below median severity, there were no such differences between treatment groups. CONCLUSION: MBCT provided significant protection against relapse for participants with increased vulnerability due to history of childhood trauma, but showed no significant advantage in comparison to an active control treatment and usual care over the whole group of patients with recurrent depression.