36 depression-relevant abstracts february '16 newsletter

(Abreu and Bragança 2015; Amsterdam, Lorenzo-Luaces et al. 2015; Appleton, Sallis et al. 2015; Arabzadeh, Ameli et al. 2015; Bockting, Smid et al. 2015; Brent, Brunwasser et al. 2015; Clos, Rauchhaus et al. 2015; Culpin, Stapinski et al. 2015; Emery, Toste et al. 2015; Felger, Li et al. 2015; Goddard, Wingrove et al. 2015; Gorwood, Demyttenare et al. 2015; Guo, Xiang et al. 2015; Hallgren, Kraepelien et al. 2015; Holvast, Burger et al. 2015; Huijbers, Spinhoven et al. 2015; Katzelnick and Williams 2015; Kiecolt-Glaser, Derry et al. 2015; Kung, Palmer et al. 2015; Le Noury, Nardo et al. 2015; Malm, Sourander et al. 2015; Murri, Amore et al. 2015; Rohan, Mahon et al. 2015; Sanchez-Villegas, Henriquez-Sanchez et al. 2015; Sani, Madhok et al. 2015; Vázquez, Holtzman et al. 2015; Weitz, Hollon et al. 2015; Akoudad, Aarts et al. 2016; Dawes, Maggard-Gibbons et al. 2016; Gibson, Baker et al. 2016; Lasserre, Marti-Soler et al. 2016; Ludman, Simon et al. 2016; O'Connor, Rossom et al. 2016; Pots, Fledderus et al. 2016; Siu and and the 2016; Uher and Pavlova 2016)

Abreu, T. and M. Bragança (2015). ***"The bipolarity of light and dark: A review on bipolar disorder and circadian cycles."*** Journal of Affective Disorders 185: 219-229. http://www.sciencedirect.com/science/article/pii/S016503271530255X

AbstractBackground Bipolar Disorder is characterized by episodes running the full mood spectrum, from mania to depression. Between mood episodes, residual symptoms remain, as sleep alterations, circadian cycle disturbances, emotional deregulation, cognitive impairment and increased risk for comorbidities. The present review intends to reflect about the most recent and relevant information concerning the biunivocal relation between bipolar disorder and circadian cycles. Methods It was conducted a literature search on PubMed database using the search terms "bipolar", "circadian", "melatonin", "cortisol", "body temperature", "Clock gene", "Bmal1 gene", "Per gene", "Cry gene", "GSK3β", "chronotype", "light therapy", "dark therapy", "sleep deprivation", "lithum" and "agomelatine". Search results were manually reviewed, and pertinent studies were selected for inclusion as appropriate. Results Several studies support the relationship between bipolar disorder and circadian cycles, discussing alterations in melatonin, body temperature and cortisol rhythms; disruption of sleep/wake cycle; variations of clock genes; and chronotype. Some therapeutics for bipolar disorder directed to the circadian cycles disturbances are also discussed, including lithium carbonate, agomelatine, light therapy, dark therapy, sleep deprivation and interpersonal and social rhythm therapy. Limitations This review provides a summary of an extensive research for the relevant literature on this theme, not a patient-wise meta-analysis. Conclusions In the future, it is essential to achieve a better understanding of the relation between bipolar disorder and the circadian system. It is required to establish new treatment protocols, combining psychotherapy, therapies targeting the circadian rhythms and the latest drugs, in order to reduce the risk of relapse and improve affective behaviour.

Akoudad, S., N. Aarts, et al. (2016). ***"Antidepressant use is associated with an increased risk of developing microbleeds."*** Stroke 47(1): 251-254. http://stroke.ahajournals.org/content/47/1/251.abstract

Background and Purpose—Serotonin-specific antidepressants may increase the risk of adverse bleeding events. In a previous cross-sectional study, we did not observe an association between antidepressant use and presence of subclinical cerebral bleedings. In this study, we investigated longitudinally whether antidepressant use is associated with an increased risk of new subclinical cerebral microbleeds.Methods—In total, 2559 participants aged ≥45 years of the population-based Rotterdam Study, all without microbleeds at baseline, underwent baseline and repeat brain magnetic resonance imaging between 2005 and 2013 (mean time interval, 3.9 years; SD, 0.5) to determine the incidence of microbleeds. Antidepressant use (yes versus no) was assessed between baseline and follow-up scan. In additional analyses, antidepressants were classified as low, intermediate, or high affinity for the serotonin transporter, and alternatively as selective serotonin reuptake inhibitors or non-selective serotonin reuptake inhibitors. We used multivariable logistic regression models to investigate the association of antidepressants with incident microbleeds.Results—Antidepressant use was associated with a higher cerebral microbleed incidence (odds ratio, 2.22; 95% confidence interval, 1.31–3.76) than nonuse. When stratified by affinity for the serotonin transporter, intermediate serotonin affinity antidepressant use was associated with an increased risk of developing microbleeds (odds ratio, 3.07; 95% confidence interval, 1.53–6.17). Finally, selective serotonin reuptake inhibitor and non-selective serotonin reuptake inhibitor use were both associated with increased microbleed incidence.Conclusions—Antidepressant use was associated with an increased risk of developing microbleeds. Our results may support findings from previous clinical studies about increased intracranial and extracranial bleeding risk in antidepressant users.

Amsterdam, J. D., L. Lorenzo-Luaces, et al. (2015). ***"Safety and effectiveness of continuation antidepressant versus mood stabilizer monotherapy for relapse-prevention of bipolar ii depression: A randomized, double-blind, parallel-group, prospective study."*** Journal of Affective Disorders 185: 31-37. http://www.sciencedirect.com/science/article/pii/S016503271530094X

Objective Compare the safety and effectiveness of continuation antidepressant versus mood stabilizer monotherapy for preventing depressive relapse in bipolar II disorder. Methods Subjects ≥18 years old with bipolar II depression (n=129) were randomized to double-blind venlafaxine or lithium monotherapy for 12 weeks. Responders with a ≥50% reduction in depression score were continued for an additional 6 months of relapse-prevention monotherapy. Primary outcome was depressive relapse during continuation monotherapy. Secondary outcomes included sustained response rate from initiation of treatment to study end-point, relapse hazard, time to relapse, change in mania ratings, and frequency of treatment-emergent sub-syndromal hypomania and/or depressive episodes. Results Venlafaxine produced greater sustained response rate versus lithium ($p<0.0001$); however, there was no difference in relapse rate for venlafaxine (7.5%) versus lithium (26.7%) ($p=0.079$); relapse hazard ($p=0.073$), or time to relapse ($p=0.090$) between treatment conditions during continuation monotherapy. There were no group differences in mania rating scores over time and no difference in frequency or duration of syndromal or sub-syndromal hypomanic episodes. There were more sub-syndromal depressive episodes during lithium monotherapy ($p=0.03$). Limitations Sample size was limited by the lower sustained response rate for lithium versus venlafaxine; study was not specifically powered to detect differences in treatment-emergent hypomanic or depressive episodes between groups. Conclusion Results suggest that continuation venlafaxine monotherapy may provide similar prophylactic effectiveness relative to lithium, with no difference in treatment-emergent hypomanic episodes and without the need for frequent serum lithium level and metabolic monitoring. Larger, prospective trials are needed to confirm these observations.

Appleton, K. M., H. M. Sallis, et al. (2015). ***"Omega-3 fatty acids for depression in adults."*** Cochrane Database Syst Rev 11: CD004692. http://www.ncbi.nlm.nih.gov/pubmed/26537796

BACKGROUND: Major depressive disorder (MDD) is highly debilitating, difficult to treat, has a high rate of recurrence, and negatively impacts the individual and society as a whole. One emerging potential treatment for MDD is n-3 polyunsaturated fatty acids (n-3PUFAs), also known as omega-3 oils, naturally found in fatty fish, some other seafood, and some nuts and seeds. Various lines of evidence suggest a role for n-3PUFAs in MDD, but the evidence is far from conclusive. Reviews and meta-analyses clearly demonstrate heterogeneity between studies. Investigations of heterogeneity suggest differential effects of n-3PUFAs, depending on severity of depressive symptoms, where no effects of n-3PUFAs are found in studies of individuals with mild depressive symptomology, but possible benefit may be suggested in studies of individuals with more severe depressive symptomology. OBJECTIVES: To assess the effects of n-3 polyunsaturated fatty acids (also known as omega-3 fatty acids) versus a comparator (e.g. placebo, anti-depressant treatment, standard care, no treatment, wait-list control) for major depressive disorder (MDD) in adults. SEARCH METHODS: We searched the Cochrane Depression, Anxiety and Neurosis Review Group's Specialised Registers (CCDANCTR) and International Trial Registries over all years to May 2015. We searched the database CINAHL over all years of records to September 2013. SELECTION CRITERIA: We included studies in the review if they: were a randomised controlled trial; provided n-3PUFAs as an intervention; used a comparator; measured depressive symptomology as an outcome; and were conducted in adults with MDD. Primary outcomes were depressive symptomology (continuous data collected using a validated rating scale) and adverse events. Secondary outcomes were depressive symptomology (dichotomous data on remission and response), quality of life, and failure to complete studies. DATA COLLECTION AND ANALYSIS: We used standard methodological procedures as expected by Cochrane. MAIN RESULTS: We found 26 relevant studies: 25 studies involving a total of 1438 participants investigated the impact of n-3PUFA supplementation compared to placebo, and one study involving 40 participants investigated the impact of n-3PUFA supplementation compared to antidepressant treatment.For the placebo comparison, n-3PUFA supplementation results in a small to modest benefit for depressive symptomology, compared to placebo: standardised mean difference (SMD) -0.32 (95% confidence interval (CI) -0.12 to -0.52; 25 studies, 1373 participants, very low quality evidence), but this effect is unlikely to be clinically meaningful (an SMD of 0.32 represents a difference between groups in scores on the HDRS (17-item) of approximately 2.2 points (95% CI 0.8 to 3.6)). The confidence intervals include both a possible clinically important effect and a possible negligible effect, and there is considerable heterogeneity between the studies. Although the numbers of individuals experiencing adverse events were similar in intervention and placebo groups (odds ratio (OR) 1.24, 95% CI 0.95 to 1.62; 19 studies, 1207 participants; very low-quality evidence), the confidence intervals include a significant increase in adverse events with n-3PUFAs as well as a small possible decrease. Rates of remission and response, quality of life, and rates of failure to complete studies were also similar between groups, but confidence intervals are again wide.The evidence on which these results are based is very limited. All studies contributing to our analyses were of direct relevance to our research question, but we rated the quality of the evidence for all outcomes as low to very low. The number of studies and number of participants contributing to all analyses were low, and the majority of studies were small and judged to be at high risk of bias on several measures. Our analyses were also likely to be highly influenced by three large trials. Although we judge these trials to be at low risk of bias, they contribute 26.9% to 82% of data. Our effect size estimates are also imprecise. Funnel plot asymmetry and sensitivity analyses (using fixed-effect models, and only studies judged to be at low risk of selection bias, performance bias or attrition bias) also suggest a likely bias towards a positive finding for n-3PUFAs. There was substantial heterogeneity in analyses of our primary outcome of depressive symptomology. This heterogeneity was not explained by the presence or absence of comorbidities or by the presence or absence of adjunctive therapy.Only one study was available for the antidepressant comparison, involving 40 participants. This study found no differences between treatment with n-3PUFAs and treatment with antidepressants in depressive symptomology (mean difference (MD) -0.70 (95% CI -5.88 to 4.48)), rates of response to treatment or failure to complete. Adverse events were not reported in a manner suitable for analysis, and rates of depression remission and quality of life were not reported. AUTHORS' CONCLUSIONS: At present, we do not have sufficient high quality evidence to determine the effects of n-3PUFAs as a treatment for MDD. Our primary analyses suggest a small-to-modest, non-clinically beneficial effect of n-3PUFAs on depressive symptomology compared to placebo; however the estimate is imprecise, and we judged the quality of the evidence on which this result is based to be low/very low. Sensitivity analyses, funnel plot inspection and comparison of our results with those of large well-conducted trials also suggest that this effect estimate is likely to be biased towards a positive finding for n-3PUFAs, and that the true effect is likely to be smaller. Our data, however, also suggest similar rates of adverse events and numbers failing to complete trials in n-3PUFA and placebo groups, but again our estimates are very imprecise. The one study that directly compares n-3PUFAs and antidepressants in our review finds comparable benefit. More evidence, and more complete evidence, are required, particularly regarding both the potential positive and negative effects of n-3PUFAs for MDD.

Arabzadeh, S., N. Ameli, et al. (2015). ***"Celecoxib adjunctive therapy for acute bipolar mania: A randomized, double-blind, placebo-controlled trial."*** Bipolar Disorders 17(6): 606-614. http://dx.doi.org/10.1111/bdi.12324

Objectives Recent research has focused on the inflammatory cascade as a key culprit in the etiology of bipolar disorder. We hypothesized that celecoxib, via its anti-inflammatory properties, may have a therapeutic role in mood disorder. Methods Forty-six inpatients with the diagnosis of acute bipolar mania without psychotic features participated in a parallel, randomized, double-blind, placebo-controlled trial, and underwent six weeks of treatment with either celecoxib (400 mg daily) or placebo as an adjunctive treatment to sodium valproate. Patients were evaluated using the Young Mania Rating Scale (YMRS) and Hamilton Depression Rating Scale (HDRS). The primary outcome measure with respect to efficacy was the mean decrease in YMRS score from baseline to the study endpoint, which was compared between the two groups. Results A significant difference was observed in the change in YMRS scores on Day 42 compared to baseline in the two groups ($p < 0.001$). The changes at the endpoint compared to baseline were -29.78 ± 21.78 (mean ± standard deviation) and -21.78 ± 7.16 for the celecoxib and placebo groups, respectively. A significantly higher remission rate was observed in the celecoxib group (87.0%) than the placebo group (43.5%) at Week 6 ($p = 0.005$). General linear model repeated measures demonstrated a significant effect for the time × treatment interaction on the YMRS scores [$F(2.27,99.98) = 6.67$, $p = 0.001$]. Conclusions Celecoxib is an effective adjuvant therapy in the treatment of manic episodes (without psychotic features) of bipolar mood disorder. The mood-stabilizing role of the drug might be mediated via its action on the inflammatory cascade.

Bockting, C. L. H., N. H. Smid, et al. (2015). ***"Enduring effects of preventive cognitive therapy in adults remitted from recurrent depression: A 10 year follow-up of a randomized controlled trial."*** Journal of Affective Disorders 185: 188-194. http://www.sciencedirect.com/science/article/pii/S0165032715004097

Background Prevention of recurrence is a challenge in the management of major depressive disorder (MDD). The long-term effects of Preventive Cognitive Therapy (PCT) in preventing recurrence in MDD are not known. Methods A RCT comparing the addition of PCT to Treatment As Usual (TAU), versus TAU including patients with recurrent depression who were in remission at entry (N=172). PCT consisted of eight weekly group sessions. TAU involved standard treatment. Primary outcome is time to first recurrence of a depressive episode as assessed by blinded interviewers over 10 years based on DSM-IV-TR criteria. Results Also over 10 years, the protective effect of PCT was dependent on the number of previous episodes a patient experienced. The protective effect intensified with the number of previous depressive episodes (Cox regression; p=.004, Hazard ratio=.576, 95% CI=.396–.837) and is mainly established within the first half of the 10 year follow-up period. For patients with more than three

previous episodes (52% of the sample), PCT significantly increased the median survival time (713.0 days) versus patients that received TAU (205.0 days). No enduring effects were found on secondary outcomes. Limitations Dropout rates were relatively high for secondary outcomes, but relatively low for the primary outcome. Results were comparable after multiple imputation. Conclusions PCT in remitted patients with multiple prior episodes has long-term preventive effects on time to recurrence. To reduce recurrence rates, booster sessions might be necessary. A personalized medicine approach might be necessary to reduce recurrence rates even further.

Brent, D. A., S. M. Brunwasser, et al. (2015). ***"Effect of a cognitive-behavioral prevention program on depression 6 years after implementation among at-risk adolescents: A randomized clinical trial."*** JAMA Psychiatry 72(11): 1110-1118. http://dx.doi.org/10.1001/jamapsychiatry.2015.1559

Importance Adolescents whose parents have a history of depression are at risk for developing depression and functional impairment. The long-term effects of prevention programs on adolescent depression and functioning are not known. Objective To determine whether a cognitive-behavioral prevention (CBP) program reduced the incidence of depressive episodes, increased depression-free days, and improved developmental competence 6 years after implementation. Design, Setting, and Participants A 4-site randomized clinical trial compared the effect of CBP plus usual care vs usual care, through follow-up 75 months after the intervention (88% retention), with recruitment from August 2003 through February 2006 at a health maintenance organization, university medical centers, and a community mental health center. A total of 316 participants were 13 to 17 years of age at enrollment and had at least 1 parent with current or prior depressive episodes. Participants could not be in a current depressive episode but had to have subsyndromal depressive symptoms or a prior depressive episode currently in remission. Analysis was conducted between August 2014 and June 2015.Interventions The CBP program consisted of 8 weekly 90-minute group sessions followed by 6 monthly continuation sessions. Usual care consisted of any family-initiated mental health treatment. Main Outcomes and Measures The Depression Symptoms Rating scale was used to assess the primary outcome, new onsets of depressive episodes, and to calculate depression-free days. A modified Status Questionnaire assessed developmental competence (eg, academic or interpersonal) in young adulthood. Results Over the 75-month follow-up, youths assigned to CBP had a lower incidence of depression, adjusting for current parental depression at enrollment, site, and all interactions (hazard ratio, 0.71 [95% CI, 0.53-0.96]). The CBP program's overall significant effect was driven by a lower incidence of depressive episodes during the first 9 months after enrollment. The CBP program's benefit was seen in youths whose index parent was not depressed at enrollment, on depression incidence (hazard ratio, 0.54 [95% CI, 0.36-0.81]), depression-free days (d = 0.34, P = .01), and developmental competence (d = 0.36, P = .04); these effects on developmental competence were mediated via the CBP program's effect on depression-free days. Conclusions and Relevance The effect of CBP on new onsets of depression was strongest early and was maintained throughout the follow-up period; developmental competence was positively affected 6 years later. The effectiveness of CBP may be enhanced by additional booster sessions and concomitant treatment of parental depression.

Clos, S., P. Rauchhaus, et al. (2015). ***"Long-term effect of lithium maintenance therapy on estimated glomerular filtration rate in patients with affective disorders: A population-based cohort study."*** The Lancet Psychiatry 2(12): 1075-1083. http://dx.doi.org/10.1016/S2215-0366(15)00316-8

Background For more than 40 years, the long-term effect of lithium maintenance therapy on renal function has been debated. We aimed to assess the effect of lithium maintenance therapy on estimated glomerular filtration rate (eFGR) in patients with affective disorders, and explore predictors for a decrease in eGFR. Methods This population-based cohort study included adult patients (18–65 years of age at baseline) in Tayside (Scotland, UK) who had recently started on lithium maintenance treatment between Jan 1, 2000, and Dec 31, 2011 (retrospectively assigned to the lithium group) or those with exposure to other first-line drugs used in the treatment of affective disorders (quetiapine, olanzapine, and semisodium valproate) during the same period (retrospectively assigned to the comparator group). Patients had to have at least 6 months of (incidence) exposure to lithium or any of the comparator drugs, at least two eGFR values available in the observation period (one at baseline and at least one after ≥6 months post baseline). We excluded patients with previous exposure to lithium or one of the comparator drugs, those with a previous diagnosis of schizophrenia or other psychotic disorder, those with glomerular disease, tubulo-interstitial disease, or chronic kidney disease stages 4–5 at baseline, and those who had undergone renal transplant before exposure. Maximum follow-up was 12 years. Data were provided by the University of Dundee Health Informatics Centre, who have access to health-related population-based datasets containing data for every patient registered with a regional family doctor. Each patient has a unique ten-digit identifier, the Community Health Index, enabling us to link laboratory tests, dispensed community prescriptions, Scottish Morbidity Records, and mortality records to the patient. All data were anonymised according to Health Informatics Centre standard operating procedures. The primary outcome was the change per year in the eGFR, adjusted for age, sex, and baseline eGFR, and analysed by random coefficient models. Findings 1120 patients (305 exposed to lithium and 815 to comparator drugs) qualified for inclusion, providing 13 963 eGFR values over 12 years. The mean duration of exposure to lithium was 55 months (SD 42; range 6–144). Mean annual decline in eGFR (adjusted for age, sex, and baseline eGFR) was 1·3 mL/min per 1·73 m2 (SE 0·2) in the lithium group, which did not differ significantly to that in the comparator group (0·9 mL/min/1·73 m2 [SE 0·15]). After adjustment for additional confounders, the monthly decline in eGFR attributable to lithium exposure amounted to 0·02 mL/min per 1·73 m2 (SE 0·02, p=0·30). As a post-hoc secondary outcome, we estimated the annual decline in eGFR for the lithium group to be 1·0 mL/min per 1·73 m2 (SE 0·2), which again did not differ significantly to that in the comparator group (0·4 mL/min/1·73 m2 [SE 0·2]. Modelling identified significant predictors for eGFR decline as age, baseline eGFR, comorbidities, co-prescriptions of nephrotoxic drugs, and episodes of lithium toxicity; however, duration of exposure to lithium and mean serum lithium level were not significant predictors for eGFR decline. Interpretation Our analysis suggests no effect of stable lithium maintenance therapy (lithium levels in therapeutic range) on the rate of change in eGFR over time. Our results therefore contradict the idea that long-term lithium therapy is associated with nephrotoxicity in the absence of episodes of acute intoxication and that duration of therapy and cumulative dose are the major determinants of toxicity.

Culpin, I., L. Stapinski, et al. (2015). ***"Exposure to socioeconomic adversity in early life and risk of depression at 18 years: The mediating role of locus of control."*** Journal of Affective Disorders 183: 269-278. http://www.sciencedirect.com/science/article/pii/S0165032715003304

(Free full text available) Background Previous studies have linked exposure to early socioeconomic adversity to depression, but the mechanisms of this association are not well understood. Locus of control (LoC), an individual's control-related beliefs, has been implicated as a possible mechanism, however, longitudinal evidence to support this is lacking. Methods The study sample comprised 8803 participants from a UK cohort, the Avon Longitudinal Study of Parents and Children (ALSPAC). Indicators of early socioeconomic adversity were collected from the antenatal period to 5 years and modelled as a latent factor. Depression was assessed using the Clinical Interview Schedule-Revised (CIS-R) at 18 years. LoC was assessed with the Nowicki–Strickland Internal–External (CNSIE) scale at 16 years. Results Using structural equation modelling, we found that 34% of the total estimated association between early socioeconomic adversity and depression at 18 years was explained by external

LoC at 16 years. There was weak evidence of a direct pathway from early socioeconomic adversity to depression after accounting for the indirect effect via external locus of control. Socioeconomic adversity was associated with more external LoC, which, in turn, was associated with depression. Limitations Attrition may have led to an underestimation of the direct and indirect effect sizes in the complete case analysis. Conclusions Results suggest that external LoC in adolescence is one of the factors mediating the link between early adversity and depression at 18 years. Cognitive interventions that seek to modify maladaptive control beliefs in adolescence may be effective in reducing risk of depression following early life adversity.

Dawes, A. J., M. Maggard-Gibbons, et al. (2016). ***"Mental health conditions among patients seeking and undergoing bariatric surgery: A meta-analysis."*** JAMA 315(2): 150-163. http://dx.doi.org/10.1001/jama.2015.18118

Importance Bariatric surgery is associated with sustained weight loss and improved physical health status for severely obese individuals. Mental health conditions may be common among patients seeking bariatric surgery; however, the prevalence of these conditions and whether they are associated with postoperative outcomes remains unknown.Objective To determine the prevalence of mental health conditions among bariatric surgery candidates and recipients, to evaluate the association between preoperative mental health conditions and health outcomes following bariatric surgery, and to evaluate the association between surgery and the clinical course of mental health conditions.Data Sources We searched PubMed, MEDLINE on OVID, and PsycINFO for studies published between January 1988 and November 2015. Study quality was assessed using an adapted tool for risk of bias; quality of evidence was rated based on GRADE (Grading of Recommendations Assessment, Development and Evaluation) criteria.Findings We identified 68 publications meeting inclusion criteria: 59 reporting the prevalence of preoperative mental health conditions (65 363 patients) and 27 reporting associations between preoperative mental health conditions and postoperative outcomes (50 182 patients). Among patients seeking and undergoing bariatric surgery, the most common mental health conditions, based on random-effects estimates of prevalence, were depression (19% [95% CI, 14%-25%]) and binge eating disorder (17% [95% CI, 13%-21%]). There was conflicting evidence regarding the association between preoperative mental health conditions and postoperative weight loss. Neither depression nor binge eating disorder was consistently associated with differences in weight outcomes. Bariatric surgery was, however, consistently associated with postoperative decreases in the prevalence of depression (7 studies; 8%-74% decrease) and the severity of depressive symptoms (6 studies; 40%-70% decrease).Conclusions and Relevance Mental health conditions are common among bariatric surgery patients—in particular, depression and binge eating disorder. There is inconsistent evidence regarding the association between preoperative mental health conditions and postoperative weight loss. Moderate-quality evidence supports an association between bariatric surgery and lower rates of depression postoperatively.

Emery, A. A., J. Toste, et al. (2015). ***"The balance of intrinsic need satisfaction across contexts as a predictor of depressive symptoms in children and adolescents."*** Motivation and Emotion 39(5): 753-765. http://dx.doi.org/10.1007/s11031-015-9491-0

The purpose of the present study was to test the applicability of self-determination theory (Deci and Ryan in J Res Pers 19:109–134. doi:10.1016/0092-6566(85)90023-6, 1985; Can Psychol 49:182–185. doi:10.1037/a0012801, 2008) across developmental periods by differentiating children and adolescents on the importance of individual needs (i.e., autonomy, competence, relatedness) and the role of balance across contexts (i.e., home, school, peers) in predicting depressive symptoms. Participants completed the Children's Intrinsic Need Satisfaction Scale (Koestner and Veronneau in The Children's Intrinsic Needs Satisfaction Scale. McGill University, Montreal, 2001) and the Children's Depression Inventory (Kovacs in Children's depression inventory manual. Multi-Health Systems, North Tonawanda, 1992). Results indicated that only the need for competence was significantly related to depressive symptoms in the child sample (n = 149) whereas, the satisfaction of autonomy and relatedness were significant predictors in the adolescent sample (n = 153). In both samples, need balance across contexts was a significant predictor over and above the level of satisfaction of each individual need. Implications for clinical practice and for theory will be presented.

Felger, J. C., Z. Li, et al. (2015). ***"Inflammation is associated with decreased functional connectivity within corticostriatal reward circuitry in depression."*** Mol Psychiatry. http://dx.doi.org/10.1038/mp.2015.168

(Available in free full text) Depression is associated with alterations in corticostriatal reward circuitry. One pathophysiological pathway that may drive these changes is inflammation. Biomarkers of inflammation (for example, cytokines and C-reactive protein (CRP)) are reliably elevated in depressed patients. Moreover, administration of inflammatory stimuli reduces neural activity and dopamine release in reward-related brain regions in association with reduced motivation and anhedonia. Accordingly, we examined whether increased inflammation in depression affects corticostriatal reward circuitry to lead to deficits in motivation and goal-directed motor behavior. Resting-state functional magnetic resonance imaging was conducted on 48 medically stable, unmedicated outpatients with major depression. Whole-brain, voxel-wise functional connectivity was examined as a function of CRP using seeds for subdivisions of the ventral and dorsal striatum associated with motivation and motor control. Increased CRP was associated with decreased connectivity between ventral striatum and ventromedial prefrontal cortex (vmPFC) (corrected $P<0.05$), which in turn correlated with increased anhedonia ($R=-0.47$, $P=0.001$). Increased CRP similarly predicted decreased dorsal striatal to vmPFC and presupplementary motor area connectivity, which correlated with decreased motor speed ($R=0.31$ to 0.45, $P<0.05$) and increased psychomotor slowing ($R=-0.35$, $P=0.015$). Of note, mediation analyses revealed that these effects of CRP on connectivity mediated significant relationships between CRP and anhedonia and motor slowing. Finally, connectivity between striatum and vmPFC was associated with increased plasma interleukin (IL)-6, IL-1beta and IL-1 receptor antagonist ($R=-0.33$ to -0.36, $P<0.05$). These findings suggest that decreased corticostriatal connectivity may serve as a target for anti-inflammatory or pro-dopaminergic treatment strategies to improve motivational and motor deficits in patients with increased inflammation, including depression. [MedXpress - http://medicalxpress.com/news/2015-11-inflammation-linked-weakened-reward-circuits.html - note "About one third of people with depression have high levels of inflammation markers in their blood. New research indicates that persistent inflammation affects the brain in ways that are connected with stubborn symptoms of depression, such as anhedonia, the inability to experience pleasure. The results were published online on Nov. 10 in Molecular Psychiatry. The findings bolster the case that the high-inflammation form of depression is distinct, and are guiding researchers' plans to test treatments tailored for it. Anhedonia is a core symptom of depression that is particularly difficult to treat, says lead author Jennifer Felger, PhD, assistant professor of psychiatry and behavioral sciences at Emory University School of Medicine and Winship Cancer Institute. "Some patients taking antidepressants continue to suffer from anhedonia," Felger says. "Our data suggest that by blocking inflammation or its effects on the brain, we may be able to reverse anhedonia and help depressed individuals who fail to respond to antidepressants."]

Gibson, P. A., E. H. Baker, et al. (2016). ***"The role of sex, gender, and education on depressive symptoms among young adults in the united states."*** Journal of Affective Disorders 189: 306-313. http://www.sciencedirect.com/science/article/pii/S0165032715302032

(Available in free full text) Background Men are less likely to experience depression and both women and men who self-assess as high in traits associated with masculinity are less likely to experience depression. Recent theoretical developments stress that the context of gender construction varies by other aspects of social status such as education. Methods Data come from the National Longitudinal Study of Adolescent Health Wave III, romantic relationship sub-sample, a nationally representative sample of middle and high school students in the U.S. in 1997. Wave III data were collected in 2001–2002 when they are ages 18–26. A subsample of individuals who were or currently are in a romantic relationship (N=4302) were administered the Bem Sex Role Inventory (BSRI). Results We find that femininity, not masculinity, results in less depressive symptoms among women regardless of education. Femininity is associated with less depressive symptoms among college educated men, but masculinity is associated with less depressive symptoms among non-college educated men. Sex differences in the association between gender traits and depression symptoms are smaller among those who have attended college. Conclusions Results stress the importance of context for understanding the relationship between sex, gender, and depression. Individuals benefit more from both masculinity and femininity with increased education. Conversely, those with less education may be penalized for sex–gender incongruent traits in terms of mental health. Limitations These analyses are cross-sectional, making causal inference impossible. This sample is limited to young adults who were or had been in a romantic relationship at the time of the survey.

Goddard, E., J. Wingrove, et al. (2015). ***"The impact of comorbid personality difficulties on response to iapt treatment for depression and anxiety."*** Behaviour Research and Therapy 73: 1-7.
http://www.sciencedirect.com/science/article/pii/S0005796715300139

(Available in free full text) The UK's Improving Access to Psychological Therapies (IAPT) initiative provides evidence-based psychological interventions for mild to moderate common mental health problems in a primary care setting. Predictors of treatment response are unclear. This study examined the impact of personality disorder status on outcome in a large IAPT service. We hypothesised that the presence of probable personality disorder would adversely affect treatment response. Method We used a prospective cohort design to study a consecutive sample of individuals (n = 1249). Results Higher scores on a screening measure for personality disorder were associated with poorer outcome on measures of depression, anxiety and social functioning, and reduced recovery rates at the end of treatment. These associations were not confounded by demographic status, initial symptom severity nor number of treatment sessions. The presence of personality difficulties independently predicted reduced absolute change on all outcome measures. Conclusions The presence of co-morbid personality difficulties adversely affects treatment outcome among individuals attending for treatment in an IAPT service. There is a need to routinely assess for the presence of personality difficulties on all individuals referred to IAPT services. This information will provide important prognostic data and could lead to the provision of more effective, personalised treatment in IAPT. [Note the 8-item personality disorder screening questionnaire used is freely downloadable at http://tinyurl.com/zbvbzzq .]

Gorwood, P., K. Demyttenare, et al. (2015). ***"An increase in joy after two weeks is more specific of later antidepressant response than a decrease in sadness."*** Journal of Affective Disorders 185: 97-103.
http://www.sciencedirect.com/science/article/pii/S0165032715003936

AbstractBackground Early improvement in positive emotions—more than decreases in negative emotions—was highly predictive of treatment response in an ecologically valid prospective manner. This result needs replication with simpler assessments to determine whether it can be translated into clinical practice. Methods 2049 adult depressed outpatients receiving agomelatine were assessed at inclusion, week 2, and week 6 using the clinician-rated Quick Inventory of Depressive Symptomatology, Sheehan Disability Scale, Clinical Global Impression scale, and Multidimensional Assessment of Thymic States (MATHYS), an auto-questionnaire rating the frequency of emotions, including sadness and joy, over the previous week. Results Joy and sadness had a relatively low correlation coefficient at baseline (r=−0.277), joy (r=−0.160) being less correlated with clinical severity than sadness (r=0.317). An increase in joy at week 2 had higher specificity (85.04%) and positive predictive value (70.55%) for treatment response than decreased sadness (57.92% and 66.04%, respectively), and the global capacity of the former to predict remission, either clinical (Yule Q coefficient, 39.96%) or functional (44.35%), was even better compared to the prediction of clinical response (37.38%). Limitations MATHYS retrospectively assesses emotions, with five possible ratings only, relying on self-rated frequencies. With only a 6-week follow-up, conclusions are limited to short-term aspects of clinical and functional remission. Conclusions Early improvement in joy during the first 2 weeks of treatment is strongly specific for treatment response and remission. The frequency of joy captures the predictivity and may deserve further study regarding inclusion in depressive rating scales.

Guo, T., Y. T. Xiang, et al. (2015). ***"Measurement-based care versus standard care for major depression: A randomized controlled trial with blind raters."*** Am J Psychiatry 172(10): 1004-1013.
http://ajp.psychiatryonline.org/doi/abs/10.1176/appi.ajp.2015.14050652

OBJECTIVE: The authors compared measurement-based care with standard treatment in major depression. METHODS: Outpatients with moderate to severe major depression were consecutively randomized to 24 weeks of either measurement-based care (guideline- and rating scale-based decisions; N=61), or standard treatment (clinicians' choice decisions; N=59). Pharmacotherapy was restricted to paroxetine (20-60 mg/day) or mirtazapine (15-45 mg/day) in both groups. Depressive symptoms were measured with the Hamilton Depression Rating Scale (HAM-D) and the Quick Inventory of Depressive Symptomatology-Self-Report (QIDS-SR). Time to response (a decrease of at least 50% in HAM-D score) and remission (a HAM-D score of 7 or less) were the primary endpoints. Outcomes were evaluated by raters blind to study protocol and treatment. RESULTS: Significantly more patients in the measurement-based care group than in the standard treatment group achieved response (86.9% compared with 62.7%) and remission (73.8% compared with 28.8%). Similarly, time to response and remission were significantly shorter with measurement-based care (for response, 5.6 weeks compared with 11.6 weeks, and for remission, 10.2 weeks compared with 19.2 weeks). HAM-D scores decreased significantly in both groups, but the reduction was significantly larger for the measurement-based care group (-17.8 compared with -13.6). The measurement-based care group had significantly more treatment adjustments (44 compared with 23) and higher antidepressant dosages from week 2 to week 24. Rates of study discontinuation, adverse effects, and concomitant medications did not differ between groups. CONCLUSIONS: The results demonstrate the feasibility and effectiveness of measurement-based care for outpatients with moderate to severe major depression, suggesting that this approach can be incorporated in the clinical care of patients with major depression.

Hallgren, M., M. Kraepelien, et al. (2015). ***"Physical exercise and internet-based cognitive–behavioural therapy in the treatment of depression: Randomised controlled trial."*** The British Journal of Psychiatry 207(3): 227-234.
http://bjp.rcpsych.org/bjprcpsych/207/3/227.full.pdf

Background Depression is common and tends to be recurrent. Alternative treatments are needed that are non-stigmatising, accessible and can be prescribed by general medical practitioners. Aims To compare the effectiveness of three interventions for depression: physical exercise, internet-based cognitive–behavioural therapy (ICBT) and treatment as usual (TAU). A secondary aim was to assess changes in self-rated work capacity. Method A total of 946 patients diagnosed with mild

to moderate depression were recruited through primary healthcare centres across Sweden and randomly assigned to one of three 12-week interventions (trail registry: KCTR study ID: KT20110063). Patients were reassessed at 3 months (response rate 78%). Results Patients in the exercise and ICBT groups reported larger improvements in depressive symptoms compared with TAU. Work capacity improved over time in all three groups (no significant differences). Conclusions Exercise and ICBT were more effective than TAU by a general medical practitioner, and both represent promising non-stigmatising treatment alternatives for patients with mild to moderate depression.

Holvast, F., H. Burger, et al. (2015). ***"Loneliness is associated with poor prognosis in late-life depression: Longitudinal analysis of the netherlands study of depression in older persons."*** Journal of Affective Disorders 185: 1-7. http://www.sciencedirect.com/science/article/pii/S0165032715004024

Background Although depression and loneliness are common among older adults, the role of loneliness on the prognosis of late-life depression has not yet been determined. Therefore, we examined the association between loneliness and the course of depression. Methods We conducted a 2-year follow-up study of a cohort from the Netherlands Study of Depression in Older Persons (NESDO). This included Dutch adults aged 60–90 years with a diagnosis of major depression, dysthymia, or minor depression according to the criteria of the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition. We performed regression analyses to determine associations between loneliness at baseline and both severity and remission of depression at follow-up. We controlled for potential confounders and performed multiple imputations to account for missing data. Results Of the 285 respondents, 48% were still depressed after 2 years. Loneliness was independently associated with more severe depressive symptoms at follow-up (beta 0.61; 95% CI 0.12–1.11). Very severe loneliness was negatively associated with remission after 2 years compared with no loneliness (OR 0.25; 95% CI 0.08–0.80). Limitations Despite using multiple imputation, the large proportion of missing values probably reduces the study's precision. Generalizability to the general population may be limited by the overrepresentation of ambulatory patients with possibly more persistent forms of depression. Conclusion In this cohort, the prognosis of late-life depression was adversely affected by loneliness. Health care providers should seek to evaluate the degree of loneliness to obtain a more reliable assessment of the prognosis of late-life depression.

Huijbers, M. J., P. Spinhoven, et al. (2015). ***"Adding mindfulness-based cognitive therapy to maintenance antidepressant medication for prevention of relapse/recurrence in major depressive disorder: Randomised controlled trial."*** Journal of Affective Disorders 187: 54-61. http://www.sciencedirect.com/science/article/pii/S0165032715305231

Background Mindfulness-based cognitive therapy (MBCT) and maintenance antidepressant medication (mADM) both reduce the risk of relapse in recurrent depression, but their combination has not been studied. Our aim was to investigate whether the addition of MBCT to mADM is a more effective prevention strategy than mADM alone. Methods This study is one of two multicenter randomised trials comparing the combination of MBCT and mADM to either intervention on its own. In the current trial, recurrently depressed patients in remission who had been using mADM for 6 months or longer (n=68), were randomly allocated to either MBCT+mADM (n=33) or mADM alone (n=35). Primary outcome was depressive relapse/recurrence within 15 months. Key secondary outcomes were time to relapse/recurrence and depression severity. Analyses were based on intention-to-treat. Results There were no significant differences between the groups on any of the outcome measures. Limitations The current study included patients who had recovered from depression with mADM and who preferred the certainty of continuing medication to the possibility of participating in MBCT. Lower expectations of mindfulness in the current trial, compared with the parallel trial, may have caused selection bias. In addition, recruitment was hampered by the increasing availability of MBCT in the Netherlands, and even about a quarter of participants included in the trial who were allocated to the control group chose to get MBCT elsewhere. Conclusions For this selection of recurrently depressed patients in remission and using mADM for 6 months or longer, MBCT did not further reduce their risk for relapse/recurrence or their (residual) depressive symptoms.

Katzelnick, D. J. and M. D. Williams (2015). ***"Large-scale dissemination of collaborative care and implications for psychiatry."*** Psychiatr Serv 66(9): 904-906. http://ps.psychiatryonline.org/doi/full/10.1176/appi.ps.201400529

(Available in free full text) The evidence is overwhelming that a collaborative care approach to common mental illnesses is superior to usual care. Why isn't this model widely available? The authors of this column argue that the problem is not a lack of evidence or documentation of a better model, but the need for adoption of implementation science and dissemination knowledge to bring collaborative care into practice. They discuss the challenge of providing mental health care in the United States, the evidence that collaborative care is effective and can play a major role in expanding mental health services, the science of dissemination, six successful large-scale dissemination programs for collaborative care, and the implications of this shift in care delivery for psychiatry and all mental health providers.

Kiecolt-Glaser, J. K., H. M. Derry, et al. (2015). ***"Inflammation: Depression fans the flames and feasts on the heat."*** American Journal of Psychiatry 172(11): 1075-1091. http://ajp.psychiatryonline.org/doi/abs/10.1176/appi.ajp.2015.15020152

Depression and inflammation fuel one another. Inflammation plays a key role in depression's pathogenesis for a subset of depressed individuals; depression also primes larger cytokine responses to stressors and pathogens that do not appear to habituate. Accordingly, treatment decisions may be informed by attention to questions of how (pathways) and for whom (predispositions) these links exist, which are the focus of this article. When combined with predisposing factors (moderators such as childhood adversity and obesity), stressors and pathogens can lead to exaggerated or prolonged inflammatory responses. The resulting sickness behaviors (e.g., pain, disturbed sleep), depressive symptoms, and negative health behaviors (e.g., poor diet, a sedentary lifestyle) may act as mediating pathways that lead to further, unrestrained inflammation and depression. Depression, childhood adversity, stressors, and diet can all influence the gut microbiome and promote intestinal permeability, another pathway to enhanced inflammatory responses. Larger, more frequent, or more prolonged inflammatory responses could have negative mental and physical health consequences. In clinical practice, inflammation provides a guide to potential targets for symptom management by signaling responsiveness to certain therapeutic strategies. For example, a theme across research with cytokine antagonists, omega-3 fatty acids, celecoxib, and exercise is that anti-inflammatory interventions have a substantially greater impact on mood in individuals with heightened inflammation. Thus, when inflammation and depression co-occur, treating them in tandem may enhance recovery and reduce the risk of recurrence. The bidirectional links between depression, inflammation, and disease suggest that effective depression treatments could have a far-reaching impact on mood, inflammation, and health.

Kung, S., B. A. Palmer, et al. (2015). ***"Screening for bipolar disorders: Clinical utilization of the mood disorders questionnaire on an inpatient mood disorders unit."*** Journal of Affective Disorders 188: 97-100. http://www.sciencedirect.com/science/article/pii/S0165032715303505

Background The Mood Disorders Questionnaire (MDQ) is a widely used screening instrument for bipolar disorders. The MDQ has seldom been used in the inpatient setting, and we report a clinical, real-world inpatient validation. Methods Between

April 2011 and August 2013, patients admitted to the inpatient Mood Disorders Unit completed an MDQ as part of their admission process. Patients with a discharge diagnosis of unipolar or bipolar disorders were included. The sensitivity and specificity were calculated for each number of questionnaire items checked positive, as well as the symptoms clustered around the same time and with moderate impairment in functioning. Results A total of 1330 patient MDQ's were identified, and after excluding incomplete MDQ's and non-unipolar or bipolar diagnoses (e.g. anxiety, adjustment, or schizoaffective diagnoses), 860 MDQ's remained. One hundred fifty four patients (18%) were diagnosed with bipolar disorder, and 706 (82%) with unipolar depressive disorder. The average length of stay was 7.6 days. The optimal cutoff score was 8, resulting in a sensitivity/specificity of 86%/71%, compared to 92%/64% with a cutoff of 7. Limitations Retrospective study using clinical diagnoses instead of research instrument diagnoses. Conclusions The sensitivity of the MDQ in an inpatient mood disorders setting was higher than an outpatient psychiatric population, but the specificity was lower. A cutoff of 8 instead of the recommended outpatient cutoff of 7 was optimal. In today's busy clinical practices, a screening instrument for bipolar disorder is still useful, and the MDQ can be effectively utilized on an inpatient psychiatry mood disorders unit.

Lasserre, A. M., H. Marti-Soler, et al. (2016). ***"Clinical and course characteristics of depression and all-cause mortality: A prospective population-based study."*** Journal of Affective Disorders 189: 17-24. http://www.sciencedirect.com/science/article/pii/S0165032715304286

(Free full text available) Background Given the large heterogeneity of depressive disorders (DD), studying depression characteristics according to clinical manifestations and course is a more promising approach than studying depression as a whole. The purpose of this study was to determine the association between clinical and course characteristics of DD and incident all-cause mortality. Methods CoLaus|PsyCoLaus is a prospective cohort study (mean follow-up duration=5.2 years) including 35–66 year-old randomly selected residents of an urban area in Switzerland. A total of 3668 subjects (mean age 50.9 years, 53.0% women) underwent physical and psychiatric baseline evaluations and had a known vital status at follow-up (98.8% of the baseline sample). Clinical (diagnostic severity, atypical features) and course characteristics (recency, recurrence, duration, onset) of DD according to the DSM-5 were elicited using a semi-structured interview. Results Compared to participants who had never experienced DD, participants with current but not remitted DD were more than three times as likely to die (Hazard Ratio: 3.2, 95% CI: 1.1–10.0) after adjustment for socio-demographic and lifestyle characteristics, comorbid anxiety disorders, antidepressant use, and cardiovascular risk factors and diseases. There was no evidence for associations between other depression characteristics and all-cause mortality. Limitations The small proportion of deceased subjects impeded statistical analyses of cause-specific mortality. Conclusions A current but not remitted DD is a strong predictor of all-cause mortality, independently of cardiovascular or lifestyle factors, which suggests that the effect of depression on mortality diminishes after remission and further emphasizes the need to adequately treat current depressive episodes.

Le Noury, J., J. M. Nardo, et al. (2015). ***"Restoring study 329: Efficacy and harms of paroxetine and imipramine in treatment of major depression in adolescence."*** BMJ 351. http://www.bmj.com/bmj/351/bmj.h4320.full.pdf

Objectives To reanalyse SmithKline Beecham's Study 329 (published by Keller and colleagues in 2001), the primary objective of which was to compare the efficacy and safety of paroxetine and imipramine with placebo in the treatment of adolescents with unipolar major depression. The reanalysis under the restoring invisible and abandoned trials (RIAT) initiative was done to see whether access to and reanalysis of a full dataset from a randomised controlled trial would have clinically relevant implications for evidence based medicine. Design Double blind randomised placebo controlled trial. Setting 12 North American academic psychiatry centres, from 20 April 1994 to 15 February 1998. Participants 275 adolescents with major depression of at least eight weeks in duration. Exclusion criteria included a range of comorbid psychiatric and medical disorders and suicidality. Interventions Participants were randomised to eight weeks double blind treatment with paroxetine (20-40 mg), imipramine (200-300 mg), or placebo. Main outcome measures The prespecified primary efficacy variables were change from baseline to the end of the eight week acute treatment phase in total Hamilton depression scale (HAM-D) score and the proportion of responders (HAM-D score ≤8 or ≥50% reduction in baseline HAM-D) at acute endpoint. Prespecified secondary outcomes were changes from baseline to endpoint in depression items in K-SADS-L, clinical global impression, autonomous functioning checklist, self-perception profile, and sickness impact scale; predictors of response; and number of patients who relapse during the maintenance phase. Adverse experiences were to be compared primarily by using descriptive statistics. No coding dictionary was prespecified. Results The efficacy of paroxetine and imipramine was not statistically or clinically significantly different from placebo for any prespecified primary or secondary efficacy outcome. HAM-D scores decreased by 10.7 (least squares mean) (95% confidence interval 9.1 to 12.3), 9.0 (7.4 to 10.5), and 9.1 (7.5 to 10.7) points, respectively, for the paroxetine, imipramine and placebo groups (P=0.20). There were clinically significant increases in harms, including suicidal ideation and behaviour and other serious adverse events in the paroxetine group and cardiovascular problems in the imipramine group. Conclusions Neither paroxetine nor high dose imipramine showed efficacy for major depression in adolescents, and there was an increase in harms with both drugs. Access to primary data from trials has important implications for both clinical practice and research, including that published conclusions about efficacy and safety should not be read as authoritative. The reanalysis of Study 329 illustrates the necessity of making primary trial data and protocols available to increase the rigour of the evidence base.

Ludman, E. J., G. E. Simon, et al. (2016). ***"Organized self-management support services for chronic depressive symptoms: A randomized controlled trial."*** Psychiatric Services 67(1): 29-36. http://ps.psychiatryonline.org/doi/abs/10.1176/appi.ps.201400295

Objective: This study aimed to determine whether a self-management support service was more effective than treatment as usual in reducing depressive symptoms and major depressive episodes and increasing personal recovery among individuals with chronic or recurrent depressive symptoms. Methods: The study was a randomized controlled trial of a self-management support service consisting of depression self-management training, recovery coaching, and care coordination. The 18-month intervention included regular telephone or in-person contacts with a care manager and a structured group program co-led by a professional therapist and a trained peer specialist. Intervention (N=150) and control (N=152) participants ages ≥18 with chronic or recurrent depressive symptoms were recruited from five clinics in Seattle, Washington. Outcome measures included the Hopkins Symptom Checklist depression scale, the Recovery Assessment Scale, the Patient-Rated Global Improvement scale, and the percentage of participants with a major depressive episode. Interviewers were masked to treatment condition. Results: Repeated-measures estimates of the long-term effect of the intervention versus usual care (average of the six-, 12-, and 18-month outcomes adjusted for age, gender, and site) indicated that intervention participants had less severe symptoms (p=.002) and higher recovery scores (p=.03), were less likely to be depressed (odds ratio [OR]=.52, p=.001), and were more likely to be much improved (OR=1.96, p=.001). Conclusions: These findings support providing regular outreach care management and a self-care group offering a combined behavioral and recovery-oriented approach for people with chronic or recurrent depressive symptoms.

Malm, H., A. Sourander, et al. (2015). ***"Pregnancy complications following prenatal exposure to ssris or maternal psychiatric disorders: Results from population-based national register data."*** American Journal of Psychiatry 172(12): 1224-1232. http://ajp.psychiatryonline.org/doi/abs/10.1176/appi.ajp.2015.14121575

Objective: Using national register data, the authors examined the relationship between prenatal selective serotonin reuptake inhibitor (SSRI) treatment and pregnancy complications, accounting for psychiatric diagnoses related to SSRI use. Method: This was a population-based prospective birth cohort study using national register data. The sampling frame included 845,345 offspring, representing all singleton live births in Finland between 1996 and 2010. Pregnancies were classified as exposed to SSRIs (N=15,729), unexposed to SSRIs but with psychiatric diagnoses (N=9,652), and unexposed to medications and psychiatric diagnoses (N=31,394). Pregnancy outcomes in SSRI users were compared with those in the unexposed groups. Results: Offspring of mothers who received SSRI prescriptions during pregnancy had a lower risk for late preterm birth (odds ratio=0.84, 95% CI=0.74–0.96), for very preterm birth (odds ratio=0.52, 95% CI=0.37–0.74), and for cesarean section (odds ratio=0.70, 95% CI=0.66–0.75) compared with offspring of mothers unexposed to medications but with psychiatric disorders. In contrast, in SSRI-treated mothers, the risk was higher for offspring neonatal complications, including low Apgar score (odds ratio=1.68, 95% CI=1.34–2.12) and monitoring in a neonatal care unit (odds ratio=1.24, 95% CI=1.14–1.35). Compared with offspring of unexposed mothers, offspring of SSRI-treated mothers and mothers unexposed to medications but with psychiatric disorders were both at increased risk of many adverse pregnancy outcomes, including cesarean section and need for monitoring in a neonatal care unit. Conclusions: In a large national birth cohort, treatment of maternal psychiatric disorders with SSRIs during pregnancy was related to a lower risk of preterm birth and cesarean section but a higher risk of neonatal maladaptation. The findings provide novel evidence for a protective role of SSRIs on some deleterious reproductive outcomes, possibly by reducing maternal depressive symptoms. The divergent findings suggest that clinical decisions on SSRI use during pregnancy should be individualized, taking into account the mother's psychiatric and reproductive history.

Murri, M. B., M. Amore, et al. (2015). ***"Physical exercise for late-life major depression."*** The British Journal of Psychiatry 207(3): 235-242. http://bjp.rcpsych.org/bjprcpsych/207/3/235.full.pdf

Background Interventions including physical exercise may help improve the outcomes of late-life major depression, but few studies are available. Aims To investigate whether augmenting sertraline therapy with physical exercise leads to better outcomes of late-life major depression. Method Primary care patients (> 65 years) with major depression were randomised to 24 weeks of higher-intensity, progressive aerobic exercise plus sertraline (S+PAE), lower-intensity, non-progressive exercise plus sertraline (S+NPE) and sertraline alone. The primary outcome was remission (a score of ≤10 on the Hamilton Rating Scale for Depression). Results A total of 121 patients were included. At study end, 45% of participants in the sertraline group, 73% of those in the S+NPE group and 81% of those in the S+PAE group achieved remission (P = 0.001). A shorter time to remission was observed in the S+PAE group than in the sertraline-only group. Conclusions Physical exercise may be a safe and effective augmentation to antidepressant therapy in late-life major depression.

O'Connor, E., R. C. Rossom, et al. (2016). ***"Primary care screening for and treatment of depression in pregnant and postpartum women: Evidence report and systematic review for the us preventive services task force."*** JAMA 315(4): 388-406. http://dx.doi.org/10.1001/jama.2015.18948

Importance Depression is a source of substantial burden for individuals and their families, including women during the pregnant and postpartum period.Objective To systematically review the benefits and harms of depression screening and treatment, and accuracy of selected screening instruments, for pregnant and postpartum women. Evidence for depression screening in adults in general is available in the full report.Data Sources MEDLINE, PubMed, PsycINFO, and the Cochrane Collaboration Registry of Controlled Trials through January 20, 2015; references; and government websites.Study Selection English-language trials of benefits and harms of depression screening, depression treatment in pregnant and postpartum women with screen-detected depression, and diagnostic accuracy studies of depression screening instruments in pregnant and postpartum women.Data Extraction and Synthesis Two investigators independently reviewed abstracts and full-text articles and extracted data from fair- and good-quality studies. Random-effects meta-analysis was used to estimate the benefit of cognitive behavioral therapy (CBT) in pregnant and postpartum women.Main Outcomes and Measures Depression remission, prevalence, symptoms, and related measures of depression recovery or response; sensitivity and specificity of selected screening measures to detect depression; and serious adverse effects of antidepressant treatment.Results Among pregnant and postpartum women 18 years and older, 6 trials (n = 11 869) showed 18% to 59% relative reductions with screening programs, or 2.1% to 9.1% absolute reductions, in the risk of depression at follow-up (3-5 months) after participation in programs involving depression screening, with or without additional treatment components, compared with usual care. Based on 23 studies (n = 5398), a cutoff of 13 on the English-language Edinburgh Postnatal Depression Scale demonstrated sensitivity ranging from 0.67 (95% CI, 0.18-0.96) to 1.00 (95% CI, 0.67-1.00) and specificity consistently 0.87 or higher. Data were sparse for Patient Health Questionnaire instruments. Pooled results for the benefit of CBT for pregnant and postpartum women with screen-detected depression showed an increase in the likelihood of remission (pooled relative risk, 1.34 [95% CI, 1.19-1.50]; No. of studies [K] = 10, I2 = 7.9%) compared with usual care, with absolute increases ranging from 6.2% to 34.6%. Observational evidence showed that second-generation antidepressant use during pregnancy may be associated with small increases in the risks of potentially serious harms.Conclusions and Relevance Direct and indirect evidence suggested that screening pregnant and postpartum women for depression may reduce depressive symptoms in women with depression and reduce the prevalence of depression in a given population. Evidence for pregnant women was sparser but was consistent with the evidence for postpartum women regarding the benefits of screening, the benefits of treatment, and screening instrument accuracy.

Pots, W. T. M., M. Fledderus, et al. (2016). ***"Acceptance and commitment therapy as a web-based intervention for depressive symptoms: Randomised controlled trial."*** British Journal of Psychiatry 208(1): 69-77. http://bjp.rcpsych.org/content/208/1/69

Background Depression is a highly prevalent disorder, causing a large burden of disease and substantial economic costs. Web-based self-help interventions seem promising in promoting mental health. Aims To compare the efficacy of a guided web-based intervention based on acceptance and commitment therapy (ACT) with an active control (expressive writing) and a waiting-list control condition (Netherlands Trial Register NTR1296). Method Adults with depressive symptoms from the general population were randomised to ACT (n = 82), expressive writing (n = 67) or waiting-list control (n = 87). The main outcome was reduction in depressive symptoms assessed with the Center for Epidemiological Studies – Depression scale. Results Significant reductions in depressive symptoms were found following the ACT intervention, compared with the control group (Cohen's d = 0.56) and the expressive writing intervention (d = 0.36). The effects were sustained at 6-month and 12-month follow-up. Conclusions Acceptance and commitment therapy as a web-based public mental health intervention for adults with depressive symptoms can be effective and applicable.

Rohan, K. J., J. Mahon, et al. (2015). ***"Randomized trial of cognitive-behavioral therapy versus light therapy for seasonal affective disorder: Acute outcomes."*** American Journal of Psychiatry 172(9): 862-869. http://ajp.psychiatryonline.org/doi/abs/10.1176/appi.ajp.2015.14101293

Objective: Whereas considerable evidence supports light therapy for winter seasonal affective disorder (SAD), data on cognitive-behavioral therapy for SAD (CBT-SAD) are promising but preliminary. This study estimated the difference between CBT-SAD and light therapy outcomes in a large, more definitive test. Method: The participants were 177 adults with a current episode of major depression that was recurrent with a seasonal pattern. The randomized clinical trial compared 6 weeks of CBT-SAD (N=88) and light therapy (N=89). Light therapy consisted of 10,000-lux cool-white florescent light, initiated at 30 minutes each morning and adjusted according to a treatment algorithm based on response and side effects. CBT-SAD comprised 12 sessions of the authors' SAD-tailored protocol in a group format and was administered by Ph.D. psychologists in two 90-minute sessions per week. Outcomes were continuous scores on the Structured Interview Guide for the Hamilton Rating Scale for Depression–SAD Version (SIGH-SAD, administered weekly) and Beck Depression Inventory–Second Edition (BDI-II, administered before treatment, at week 3, and after treatment) and posttreatment remission status based on cut points. Results: Depression severity measured with the SIGH-SAD and BDI-II improved significantly and comparably with CBT-SAD and light therapy. Having a baseline comorbid diagnosis was associated with higher depression scores across all time points in both treatments. CBT-SAD and light therapy did not differ in remission rates based on the SIGH-SAD (47.6% and 47.2%, respectively) or the BDI-II (56.0% and 63.6%). Conclusions: CBT-SAD and light therapy are comparably effective for SAD during an acute episode, and both may be considered as treatment options.

Sanchez-Villegas, A., P. Henriquez-Sanchez, et al. (2015). ***"A longitudinal analysis of diet quality scores and the risk of incident depression in the sun project."*** BMC Medicine 13(1): 197. http://www.biomedcentral.com/1741-7015/13/197

(Free full text available) BACKGROUND: Some studies have pointed out that several dietary patterns could be associated with a reduced risk of depression among adults. This association seems to be consistent across countries, cultures and populations. The objective of the study was to compare and to establish the type of relationship between three diet quality scores and depression in the SUN (Seguimiento Universidad de Navarra) Cohort study. METHODS: We performed a dynamic cohort study based on Spanish university graduates free of depression at baseline. Dietary intake was repeatedly assessed at baseline and after 10years of follow-up with a validated semi-quantitative food-frequency questionnaire. Three previously described diet quality scores: Mediterranean Diet Score (MDS), Pro-vegetarian Dietary Pattern (PDP) and Alternative Healthy Eating Index-2010 (AHEI-2010) were built. Participants were classified as having depression if they reported a new clinical diagnosis of depression by a physician or initiated the use of an antidepressant drug during follow-up. Time-dependent Cox regression models with cumulative averages of diet and restricted cubic splines were used to estimate hazard ratios of depression according to quintiles of adherence to the MDS, PDP and AHEI-2010. RESULTS: One thousand and fifty one incident cases of depression were observed among 15,093 participants from the SUN Cohort after a median follow-up of 8.5 years. Inverse and significant associations were observed between the three diet quality scores and depression risk. The hazard ratios and 95% confidence intervals for extreme quintiles (fifth versus first) of updated adherence to MDS, PDP and AHEI-2010 were 0.84 (0.69-1.02), 0.74 (0.61-0.89) and 0.60 (0.49-0.72), respectively. The dose-response analyses showed non-linear associations, suggesting that suboptimal adherence to these dietary patterns may partially be responsible for increased depression risk. CONCLUSIONS: Better adherence to the MDS, PDP and AHEI-2010 was associated with a reduced risk of depression among Spanish adults. However, our data suggested a threshold effect so that although the risk of depression was reduced when comparing moderate versus lower adherence, there was not much extra benefit for the comparison between moderate and high or very high adherence.

Sani, F., V. Madhok, et al. (2015). ***"Greater number of group identifications is associated with lower odds of being depressed: Evidence from a scottish community sample."*** Social Psychiatry and Psychiatric Epidemiology 50(9): 1389-1397. http://dx.doi.org/10.1007/s00127-015-1076-4

(Available in free full text) Purpose Group identification has been shown to be associated with reduced risk of depression, but this research has important limitations. Our aim was to establish a robust link between group identification and depression whilst overcoming previous studies' shortcomings. Methods 1824 participants, recruited from General Practice throughout Scotland, completed a questionnaire measuring their identification with three groups (family, community, and a group of their choice), as well as their intensity of contact with each group. They also completed a self-rated depression measure and provided demographic information. Their medical records were also accessed to determine if they had been prescribed antidepressants in the previous 6 months. Results The number of group identifications was associated with both lower self-rated depression and lower odds of having received a prescription for antidepressants, even after controlling for the number of contact-intensive groups, level of education, gender, age, and relationship status. Conclusions Identifying with multiple groups may help to protect individuals against depression. This highlights the potential importance of social prescriptions, where health professionals encourage a depressed patient to become a member of one or more groups with which the patient believes he/she would be likely to identify.

Siu, A. L. and U. S. P. S. T. F. and the (2016). ***"Screening for depression in adults: Us preventive services task force recommendation statement."*** JAMA 315(4): 380-387. http://dx.doi.org/10.1001/jama.2015.18392

(Available in free full text) Description Update of the 2009 US Preventive Services Task Force (USPSTF) recommendation on screening for depression in adults.Methods The USPSTF reviewed the evidence on the benefits and harms of screening for depression in adult populations, including older adults and pregnant and postpartum women; the accuracy of depression screening instruments; and the benefits and harms of depression treatment in these populations. Population This recommendation applies to adults 18 years and older. Recommendation The USPSTF recommends screening for depression in the general adult population, including pregnant and postpartum women. Screening should be implemented with adequate systems in place to ensure accurate diagnosis, effective treatment, and appropriate follow-up.

Uher, R. and B. Pavlova (2016). ***"Long-term effects of depression treatment."*** The Lancet Psychiatry. http://dx.doi.org/10.1016/S2215-0366(15)00578-7

(This "Comment" is available in free full text) In most cases, depression is a recurrent or chronic condition that affects individuals over the course of their lifetime.1 The realisation that depression needs long-term treatment2 has not been matched by adequate evidence of the long-term effects of specific treatments, leaving a major gap in evidence for the clinical practice of psychiatry. The most commonly used long-term treatment is maintenance antidepressants. However, for most antidepressant drugs, the efficacy of treatment lasting more than 1 year is unknown. The absence of evidence of the long-term therapeutic effects of antidepressant drugs leaves uncertainty and invites controversy. In The Lancet Psychiatry, the Article by Nicola Wiles and colleagues3 brings perhaps the most substantial body of evidence of the long-term effects of a treatment of major depressive disorder: a comprehensive report of the effectiveness and cost-effectiveness of adjunctive cognitive behavioural therapy (CBT) in a 3·5 year follow-up of the CoBalT trial. In the CoBalT trial, 469 primary care patients with depressive

symptoms of at least moderate severity despite adherence to antidepressant treatment were randomly allocated to be offered a course of 12 to 18 sessions of individual CBT or to continue their usual care that included antidepressants. Most participants had chronic and severe depression with comorbid anxiety disorders. Those who were offered the adjunctive CBT had fewer depressive symptoms and were more likely to fulfil criteria for response at 6 and 12 month follow-up.4 In the present study, Wiles and colleagues report the results of a 46 months follow-up. Outcomes were available from roughly 60% of participants. They showed that the benefits of CBT were fully maintained. More than 3 years after the end of treatment, participants who were allocated to CBT continued to do better on several self-reported outcomes and the effect sizes were similar to those at 6 and 12 months. Participants who received CBT scored roughly four points lower on the Beck Depression Inventory (mean score of 19·2 with CBT vs 23·4 without CBT), two points lower on the Patient Health Questionnaire, had fewer anxiety symptoms, and were twice as likely to meet criteria for response or remission. These differences in outcomes were maintained for more than 3 years whereas four-fifths of participants in both groups continued to take antidepressant drugs. An accompanying health economic analysis shows that add-on individual CBT provides exceptionally good value for money. The CoBalT findings are in agreement with previous smaller studies5, 6 that suggested that the effects of CBT for depression can last for years. Although antidepressant drugs and brain stimulation treatments are effective only as long as the treatment is continued, CBT provides long-term benefits without continued treatment or booster sessions, which is probably because the participants learn skills that they continue practising after the treatment stops. Consequently, discontinued CBT might be as effective as continued treatment with antidepressant medication and more effective than antidepressant medication that is discontinued.7 CBT has been shown to improve functional outcomes, including employment.8 The present study adds strong evidence that the lasting therapeutic effects of CBT are maintained even in individuals with severe, chronic, and comorbid depression who did not respond well to antidepressants ...

Vázquez, G. H., J. N. Holtzman, et al. (2015). ***"Efficacy and tolerability of treatments for bipolar depression."*** Journal of Affective Disorders 183: 258-262. http://www.sciencedirect.com/science/article/pii/S016503271500316X

Background Depression in bipolar disorder is a major therapeutic challenge associated with disability and excess mortality. Methods We reviewed findings from randomized placebo-controlled trials concerning efficacy and adverse effects of treatments for acute bipolar depression, including anticonvulsants, antidepressants, lithium, and modern antipsychotics, to compare numbers-needed-to-treat (NNT) versus -to-harm (NNH). Results Included were data from 22 reports involving 33 drug-placebo pairs. Antidepressants (especially modern drugs) had the most favorable (highest) risk/benefit ratio (pooled NNH/NNT=18.1). Anticonvulsants were effective agents (pooled NNT=5.06), but carbamazepine and valproate were not as well tolerated (NNH<10) as lamotrigine, and they had an unfavorable pooled NNH/NNT (3.75). Some antipsychotics (lurasidone, olanzapine+fluoxetine, and quetiapine (NNT all < 10) were effective though aripiprazole and ziprasidone were not (NNT≥45); olanzapine alone was weakly effective (NNT=11.3), and all but lurasidone (NNH=20.2) were not well tolerated (NNH≤4.18). Lithium appeared to be poorly effective but well tolerated in only one trial. Conclusions Some anticonvulsants and antipsychotics seemed effective for acute bipolar depression, but most antipsychotics were not well tolerated. Antidepressants were effective and well-tolerated; lithium remains inadequately tested. Limitations There are remarkably few short-term treatment trials (2.75/12 treatments), and fewer long-term trials for bipolar depression, possibly arising from exaggerated concerns about inducing mania.

Weitz, E. S., S. D. Hollon, et al. (2015). ***"Baseline depression severity as moderator of depression outcomes between cognitive behavioral therapy vs pharmacotherapy: An individual patient data meta-analysis."*** JAMA Psychiatry 72(11): 1102-1109. http://dx.doi.org/10.1001/jamapsychiatry.2015.1516

Importance Current guidelines recommend treating severe depression with pharmacotherapy. Randomized clinical trials as well as traditional meta-analyses have considerable limitations in testing for moderators of treatment outcomes. Objectives To conduct a systematic literature search, collect primary data from trials, and analyze baseline depression severity as a moderator of treatment outcomes between cognitive behavioral therapy (CBT) and antidepressant medication (ADM).Data Sources A total of 14 902 abstracts were examined from a comprehensive literature search in PubMed, PsycINFO, EMBASE, and Cochrane Registry of Controlled Trials from 1966 to January 1, 2014. Study Selection Randomized clinical trials in which CBT and ADM were compared in patients with a DSM-defined depressive disorder were included. Data Extraction and Synthesis Study authors were asked to provide primary data from their trial. Primary data from 16 of 24 identified trials (67%), with 1700 outpatients (794 from the CBT condition and 906 from the ADM condition), were included. Missing data were imputed with multiple imputation methods. Mixed-effects models adjusting for study-level differences were used to examine baseline depression severity as a moderator of treatment outcomes. Main Outcomes and Measures Seventeen-item Hamilton Rating Scale for Depression (HAM-D) and Beck Depression Inventory (BDI). Results There was a main effect of ADM over CBT on the HAM-D ($\beta = -0.88$; $P = .03$) and a nonsignificant trend on the BDI ($\beta = -1.14$; $P = .08$, statistical test for trend), but no significant differences in response (odds ratio [OR], 1.24; $P = .12$) or remission (OR, 1.18; $P = .22$). Mixed-effects models using the HAM-D indicated that baseline depression severity does not moderate reductions in depressive symptoms between CBT and ADM at outcome ($\beta = 0.00$; $P = .96$). Similar results were seen using the BDI. Baseline depression severity also did not moderate the likelihood of response (OR, 0.99; $P = .77$) or remission (OR, 1.00; $P = .93$) between CBT and ADM. Conclusions and Relevance Baseline depression severity did not moderate differences between CBT and ADM on the HAM-D or BDI or in response or remission. This finding cannot be extrapolated to other psychotherapies, to individual ADMs, or to inpatients. However, it offers new and substantial evidence that is of relevance to researchers, physicians and therapists, and patients.