

# **30 action on depression abstracts, jan '13**

(Chalder, Wiles et al. 2012; Cox, Callahan et al. 2012; Cox, Fisher et al. 2012; Garlow, Dunlop et al. 2012; Hetrick, McKenzie et al. 2012; Jacka, Pasco et al. 2012; Jacka, Rethon et al. 2012; Kelleher, Lynch et al. 2012; Lutz, Ehrlich et al. 2012; Owen, Reese et al. 2012; Sturt, Ali et al. 2012; Wiles, Haase et al. 2012; Adam, Meinlschmidt et al. 2013; Burns, H et al. 2013; Dunlop, Rakofsky et al. 2013; Faasse, Cundy et al. 2013; Fluckiger, Grosse Holtforth et al. 2013; Hardeveld, Spijker et al. 2013; McMartin, Jacka et al. 2013; Nierenberg, Friedman et al. 2013; Norton, Cosco et al. 2013; Radhakrishnan, Hammond et al. 2013; Rawal, Collishaw et al. 2013; Sanchez-Villegas, Field et al. 2013; Sanchez-Villegas and Martinez-Gonzalez 2013; Stephansson, Kieler et al. 2013; Sylvia, Peters et al. 2013; Vinson, Turner et al. 2013; Werner-Seidler, Banks et al. 2013; Williams, Wilson et al. 2013)

Adam, Y., G. Meinlschmidt, et al. (2013). **"Associations between mental disorders and the common cold in adults: A population-based cross-sectional study."** *Journal of Psychosomatic Research* 74(1): 69-73.  
<http://www.sciencedirect.com/science/article/pii/S0022399912002188>

**Objective** To investigate the association between specific mental disorders and the common cold. **Methods** Negative binomial regression analyses were applied to examine cross-sectional associations of a broad range of mental disorders according to the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) employing the standardized Munich Composite International Diagnostic Interview, with the self-reported number of occurrences of the common cold during the past 12 months in a representative population sample of 4022 German adults aged 18–65 years. **Results** After adjustment for covariates including age, gender, and marital and socioeconomic status, having any 12-month DSM-IV mental disorder (incidence rate ratio [IRR] = 1.44, 95% confidence interval [CI] = 1.29–1.60), any substance abuse or dependence (IRR = 1.32, 95% CI = 1.14–1.52), possible psychotic disorder (IRR = 1.43, 95% CI = 1.09–1.87), any mood disorder (IRR = 1.35, 95% CI = 1.16–1.56), any anxiety disorder (IRR = 1.40, 95% CI = 1.23–1.59), or any somatoform disorder (IRR = 1.38, 95% CI = 1.18–1.62) was shown to be positively associated with the number of occurrences of a cold during the past 12 months. **Conclusion** The presence of a DSM-IV mental disorder was associated with a 44% higher risk of having experienced a cold in the past 12 months. Further studies are needed to explore potential common risk factors for incidence of mental disorders and the common cold, since the pathway connecting them has not been fully determined.

Burns, A., O. M. H, et al. (2013). **"A pilot randomised controlled trial of cognitive behavioural therapy for antenatal depression."** *BMC Psychiatry* 13(1): 33. <http://www.ncbi.nlm.nih.gov/pubmed/23339584>

**ABSTRACT: BACKGROUND:** Few trials have evaluated the effectiveness of psychological treatment in improving depression by the end of pregnancy. This is the first pilot randomised controlled trial (RCT) of individual cognitive behavioural therapy (CBT) looking at treating depression by the end of pregnancy. Our aim was to assess the feasibility of delivering a CBT intervention modified for antenatal depression during pregnancy. **METHODS:** Women in North Bristol, UK between 8--18 weeks pregnant were recruited through routine contact with midwives and randomised to receive up to 12 sessions of individual CBT in addition to usual care or to continue with usual care only. Women were eligible for randomisation if they screened positive on a 3-question depression screen used routinely by midwives and met ICD-10 criteria for depression assessed using the clinical interview schedule -- revised version (CIS-R). Two CBT therapists delivered the intervention. Follow-up was at 15 and 33 weeks post-randomisation when assessments of mental health were made using measure which included the CIS-R. **RESULTS:** Of the 50 women assessed for the trial, 36 met ICD-10 depression criteria and were randomised: 18 to the intervention and 18 to usual care. Thirteen of the 18 (72%) women who were allocated to receive the intervention completed 9 or more sessions of CBT before the end of pregnancy. Follow-up rates at 15 and 33 weeks post-randomisation were higher in the group who received the intervention (89% vs. 72% at 15 weeks and 89% vs. 61% at 33 weeks post-randomisation). At 15 weeks post-randomisation (the end of pregnancy), there were more women in the intervention group (11/16; 68.7%) who recovered (i.e. no longer met ICD-10 criteria for depression), than those receiving only usual care (5/13; 38.5%). **CONCLUSIONS:** This pilot trial shows the feasibility of conducting a large RCT to assess the effectiveness of CBT for treating antenatal depression before the end of pregnancy. The intervention could be delivered during the antenatal period and there was some evidence to suggest that it could be effective. Trial registration: ISRCTN44902048.

Chalder, M., N. J. Wiles, et al. (2012). **"A pragmatic randomised controlled trial to evaluate the cost-effectiveness of a physical activity intervention as a treatment for depression: The treating depression with physical activity (TREAD) trial."** *Health Technol Assess* 16(10): 1-164, iii-iv. <http://www.ncbi.nlm.nih.gov/pubmed/22398106>

**OBJECTIVE:** The TREATing Depression with physical activity (TREAD) study investigated the cost-effectiveness of a physical activity intervention, in addition to usual general practitioner care, as a treatment for people with depression. **DESIGN:** An individually randomised, pragmatic, multicentre randomised controlled trial with follow-up at 4, 8 and 12 months. A subset of participants took part in a qualitative study that investigated the acceptability and perceived benefits of the intervention. **SETTING:** General practices in the Bristol and Exeter areas. **PARTICIPANTS:** Aged 18-69 years with an International Statistical Classification of Diseases and Related Health Problems, 10th Edition (ICD-10) diagnosis of depression and scoring  $\geq 14$  on the Beck Depression Inventory (BDI). Those who were unable to complete self-administered questionnaires in English, with medical contraindications to physical activity or with psychosis, bipolar disorder or serious drug abuse were excluded. **INTERVENTIONS:** We devised an intervention designed to encourage choice and autonomy in the adoption of physical activity. It consisted of up to three face-to-face and ten telephone contacts delivered by a trained physical activity facilitator over an 8-month period. **MAIN OUTCOME MEASURES:** The primary outcome was the BDI score measured at 4 months. Secondary outcomes included depressive symptoms over the 12 months and quality of life, antidepressant use and level of physical activity. **RESULTS:** The study recruited 361 patients, with 182 randomised to the intervention arm and 179 to the usual care arm; there was 80% retention at the 4-month follow-up. The intervention group had a slightly lower BDI score at 4 months [-0.54, 95% confidence interval (CI) -3.06 to 1.99] but there was no evidence that the intervention improved outcome for depression. Neither was there any evidence to suggest a difference in the prescription of or self-reported use of antidepressants. However, the amount of physical activity undertaken by those who had received the intervention was increased (odds ratio 2.3, 95% CI 1.3 to 3.9) and was sustained beyond the end of the intervention. From a health-care perspective, the intervention group was more costly than the usual care group, with the cost of the intervention pound220 per person on average. It is therefore extremely unlikely that the intervention is cost-effective as a treatment for depression using current willingness-to-pay thresholds. **CONCLUSIONS:** This physical activity intervention is very unlikely to lead to any clinical benefit in terms of depressive symptoms or to be a cost-effective treatment for depression. Previous research has reported some benefit and there are three possible reasons for this discrepancy: first, even though the intervention increased self-reported physical activity, the increase in activity was not sufficiently large to lead to a measurable influence; second, only more vigorous activity might be of benefit; and third, previous studies had recruited individuals with a pre-existing commitment to physical activity. Future research is needed to identify and

explain the mechanisms by which depression might be effectively treated, including, in particular, specific guidance on the optimum type, intensity and duration of physical activity required to produce a therapeutic effect. TRIAL REGISTRATION: Current Controlled Trials ISRCTN16900744. FUNDING: This project was funded by the NIHR Health Technology Assessment programme and will be published in full in Health Technology Assessment; Vol. 16, No. 10. See the HTA programme website for further project information.

Cox, G. R., P. Callahan, et al. (2012). **"Psychological therapies versus antidepressant medication, alone and in combination for depression in children and adolescents."** *Cochrane Database Syst Rev* 11: CD008324. <http://www.ncbi.nlm.nih.gov/pubmed/23152255>

**BACKGROUND:** Depressive disorders are common in children and adolescents and, if left untreated, are likely to recur in adulthood. Depression is highly debilitating, affecting psychosocial, family and academic functioning. **OBJECTIVES:** To evaluate the effectiveness of psychological therapies and antidepressant medication, alone and in combination, for the treatment of depressive disorder in children and adolescents. We have examined clinical outcomes including remission, clinician and self reported depression measures, and suicide-related outcomes. **SEARCH METHODS:** We searched the Cochrane Depression, Anxiety and Neurosis Review Group's Specialised Register (CCDANCTR) to 11 November 2011. This register contains reports of relevant randomised controlled trials (RCTs) from the Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE (1950 to date), EMBASE (1974 to date), and PsycINFO (1967 to date). **SELECTION CRITERIA:** RCTs were eligible for inclusion if they compared i) any psychological therapy with any antidepressant medication, or ii) a combination of psychological therapy and antidepressant medication with a psychological therapy alone, or an antidepressant medication alone, or iii) a combination of psychological therapy and antidepressant medication with a placebo or 'treatment as usual', or (iv) a combination of psychological therapy and antidepressant medication with a psychological therapy or antidepressant medication plus a placebo. We included studies if they involved participants aged between 6 and 18 years, diagnosed by a clinician as having Major Depressive Disorder (MDD) based on Diagnostic and Statistical Manual (DSM) or International Classification of Diseases (ICD) criteria. **DATA COLLECTION AND ANALYSIS:** Two review authors independently selected studies, extracted data and assessed the quality of the studies. We applied a random-effects meta-analysis, using the odds ratio (OR) to describe dichotomous outcomes, mean difference (MD) to describe continuous outcomes when the same measures were used, and standard mean difference (SMD) when outcomes were measured on different scales. **MAIN RESULTS:** We included ten studies, involving 1235 participants in this review. Studies recruited participants with different severities of disorder and with a variety of comorbid disorders, including anxiety and substance use disorder, therefore limiting the comparability of the results. Regarding the risk of bias in studies, half the studies had adequate allocation concealment (there was insufficient information to determine allocation concealment in the remainder), outcome assessors were blind to the participants' intervention in six studies, and in general, studies reported on incomplete data analysis methods, mainly using intention-to-treat (ITT) analyses. For the majority of outcomes there were no statistically significant differences between the interventions compared. There was limited evidence (based on two studies involving 220 participants) that antidepressant medication was more effective than psychotherapy on measures of clinician defined remission immediately post-intervention (odds ratio (OR) 0.52, 95% confidence interval (CI) 0.27 to 0.98), with 67.8% of participants in the medication group and 53.7% in the psychotherapy group rated as being in remission. There was limited evidence (based on three studies involving 378 participants) that combination therapy was more effective than antidepressant medication alone in achieving higher remission from a depressive episode immediately post-intervention (OR 1.56, 95% CI 0.98 to 2.47), with 65.9% of participants treated with combination therapy and 57.8% of participants treated with medication, rated as being in remission. There was no evidence to suggest that combination therapy was more effective than psychological therapy alone, based on clinician rated remission immediately post-intervention (OR 1.82, 95% CI 0.38 to 8.68). Suicide-related Serious Adverse Events (SAEs) were reported in various ways across studies and could not be combined in meta-analyses. However suicidal ideation specifically was generally measured and reported using standardised assessment tools suitable for meta-analysis. In one study involving 188 participants, rates of suicidal ideation were significantly higher in the antidepressant medication group (18.6%) compared with the psychological therapy group (5.4%) (OR 0.26, 95% CI 0.09 to 0.72) and this effect appeared to remain at six to nine months (OR 1.27, 95% CI 0.68 to 2.36), with 13.6% of participants in the medication group and 3.9% of participants in the psychological therapy group reporting suicidal ideation. It was unclear what the effect of combination therapy was compared with either antidepressant medication alone or psychological therapy alone on rates of suicidal ideation. The impact of any of the assigned treatment packages on drop out was also mostly unclear across the various comparisons in the review. Limited data and conflicting results based on other outcome measures make it difficult to draw conclusions regarding the effectiveness of any specific intervention based on these outcomes. **AUTHORS' CONCLUSIONS:** There is very limited evidence upon which to base conclusions about the relative effectiveness of psychological interventions, antidepressant medication and a combination of these interventions. On the basis of the available evidence, the effectiveness of these interventions for treating depressive disorders in children and adolescents cannot be established. Further appropriately powered RCTs are required.

Cox, G. R., C. A. Fisher, et al. (2012). **"Interventions for preventing relapse and recurrence of a depressive disorder in children and adolescents."** *Cochrane Database Syst Rev* 11: CD007504. <http://www.ncbi.nlm.nih.gov/pubmed/23152246>

**BACKGROUND:** Depressive disorders often begin during childhood or adolescence. There is a growing body of evidence supporting effective treatments during the acute phase of a depressive disorder. However, little is known about treatments for preventing relapse or recurrence of depression once an individual has achieved remission or recovery from their symptoms. **OBJECTIVES:** To determine the efficacy of early interventions, including psychological and pharmacological interventions, to prevent relapse or recurrence of depressive disorders in children and adolescents. **SEARCH METHODS:** We searched the Cochrane Depression, Anxiety and Neurosis Review Group's Specialised Register (CCDANCTR) (to 1 June 2011). The CCDANCTR contains reports of relevant randomised controlled trials from The Cochrane Library (all years), EMBASE (1974 to date), MEDLINE (1950 to date) and PsycINFO (1967 to date). In addition we handsearched the references of all included studies and review articles. **SELECTION CRITERIA:** Randomised controlled trials using a psychological or pharmacological intervention, with the aim of preventing relapse or recurrence from an episode of major depressive disorder (MDD) or dysthymic disorder (DD) in children and adolescents were included. Participants were required to have been diagnosed with MDD or DD according to DSM or ICD criteria, using a standardised and validated assessment tool. **DATA COLLECTION AND ANALYSIS:** Two review authors independently assessed all trials for inclusion in the review, extracted trial and outcome data, and assessed trial quality. Results for dichotomous outcomes are expressed as odds ratio and continuous measures as mean difference or standardised mean difference. We combined results using random-effects meta-analyses, with 95% confidence intervals. We contacted lead authors of included trials and requested additional data where possible. **MAIN RESULTS:** Nine trials with 882 participants were included in the review. In five trials the outcome assessors were blind to the participants' intervention condition and in the remainder of trials it was unclear. In the majority of trials, participants were either not blind to their intervention condition, or it was unclear whether they were or not. Allocation concealment was also unclear in the majority of trials. Although all trials treated participants in an outpatient setting, the designs implemented in trials was diverse, which limits the generalisability of the results. Three trials indicated participants treated with antidepressant medication had lower relapse-recurrence rates (40.9%)

compared to those treated with placebo (66.6%) during a relapse prevention phase (odds ratio (OR) 0.34; 95% confidence interval (CI) 0.18 to 0.64,  $P = 0.02$ ). One trial that compared a combination of psychological therapy and medication to medication alone favoured a combination approach over medication alone, however this result did not reach statistical significance (OR 0.26; 95% CI 0.06 to 1.15). The majority of trials that involved antidepressant medication reported adverse events including suicide-related behaviours. However, there were not enough data to show which treatment approach results in the most favourable adverse event profile. **AUTHORS' CONCLUSIONS:** Currently, there is little evidence to conclude which type of treatment approach is most effective in preventing relapse or recurrence of depressive episodes in children and adolescents. Limited trials found that antidepressant medication reduces the chance of relapse-recurrence in the future, however, there is considerable diversity in the design of trials, making it difficult to compare outcomes across studies. Some of the research involving psychological therapies is encouraging, however at present more trials with larger sample sizes need to be conducted in order to explore this treatment approach further.

Dunlop, B. W., J. J. Rakofsky, et al. (2013). **"A simple question answered: Adding moderate-dosage lithium does not help patients with bipolar disorder."** *Am J Psychiatry* 170(1): 9-11.  
<http://ajp.psychiatryonline.org/article.aspx?articleid=1555623>

(Free full text available) Bipolar disorder is conventionally defined by the presence of discrete episodes of mania (or hypomania in the case of bipolar II disorder) and depression, but this definition does not fully encompass the true character and course of the syndrome. The majority of patients with bipolar disorder experience persistent interepisode mood symptoms and an intrinsic vulnerability to affective lability (1, 2). Thus, the lives of many patients with bipolar disorder (as well as those who love them) are complicated—and to a certain extent limited—by this persistent mood burden. It leads to markedly diminished quality of life, functioning, and productivity both for the patients (3, 4) and for their family and friends (5). Effective pharmacotherapy for patients with bipolar disorder began in 1949 with Cade's original article (6) describing the salutary effects of lithium carbonate for the treatment of patients with acute mania. This report led to double-blind active comparator studies that confirmed lithium's efficacy as an acute antimanic agent (7). We now have a variety of pharmacological agents for treating acute mania, ranging from lithium to anticonvulsants to atypical antipsychotics. Effective pharmacotherapies and psychotherapies are also available for the acute treatment of bipolar depression, and many agents are effective against the recurrence of full mood episodes. However, we do not have evidence-based treatment strategies for eliminating persistent mood symptoms in bipolar patients or successful pharmacological strategies that decrease their vulnerability to mood lability. Currently, the majority of patients with bipolar disorder take multiple mood-stabilizing medications (8). Polypharmacy is costly, increases the side effect burden, increases the risk of untoward medication interactions, and greatly complicates the lives of our patients. In this issue, Nierenberg et al. (9) report the primary results of the Lithium Treatment Moderate-Dose Use Study for bipolar disorder (LiTMUS), an effectiveness trial designed to determine if low-dosage lithium added to an optimized personalized treatment (OPT) regimen improves clinical outcome for bipolar I and bipolar II patients. There is some level of uncertainty about the minimum effective lithium level required for the treatment and prophylaxis of mood episodes in bipolar disorder, with several trials indicating that serum concentrations  $\geq 0.8$  mEq/L are associated with improved outcomes (10–12). However, clinicians frequently use low-to-moderate dosages of lithium in addition to other medications as a strategy to maximize mood stability and reduce suicidality (13). Before LiTMUS, the question of whether this common clinical strategy offers meaningful therapeutic benefit had not been carefully addressed ... The failure to detect a difference between the OPT-only and lithium-plus-OPT groups may stem in part from the design of the study. Patients who reported a treatment failure with lithium therapy in a previous episode were allowed to participate in the study. Thus, the authors may have inadvertently biased the sample against lithium augmentation. A second factor that may have affected the outcome of the study was that over half of the lithium-treated patients had blood levels  $< 0.4$  mEq/L; this concentration may have been too low for lithium augmentation to have a true pharmacological effect. Another study design feature that "raised the bar" was the use of the Texas Implementation of Medication Algorithm by expert psychopharmacologists. With treatment optimized in this fashion, lithium augmentation would have to demonstrate a rather profound additional clinical benefit to differentiate itself from OPT. A number of important lessons can be learned from the LiTMUS trial. First, one sees the power of employing a well-organized network of investigators to perform a clinical trial. The authors completed a 6-month randomized trial with 283 patients within a 2-year period. This is a remarkably rapid recruitment and completion time for any type of clinical study. Second, this trial pioneered the use of a new ecologically important approach to assessing outcome—the number of necessary clinical adjustments. This is a clinically relevant method of capturing the impact of a treatment intervention for patients suffering from a chronic syndrome that has a fluctuating course. The study also highlights the importance and value of investing in large trials that are designed to answer common clinical treatment questions. The results of this trial suggest that the addition of moderate dosages of lithium to optimized guideline-driven therapy does not confer any advantage in terms of symptom relief, functioning, or quality of life. The authors anticipate future analyses to identify predictors or subgroups of patients for whom lithium plus OPT is effective. Individual-level predictors of response to specific treatments are an important research priority. They offer the promise of a more effective and satisfying experience for patients with psychiatric syndromes. Predictors of lithium response identified from this study may complement the Pharmacogenomics of Bipolar Disorder research collaboration that is exploring the predictive value of genetic markers of lithium response (15). However, until the promise of individual predictors of response is realized, patients will be best served by treatment based on large-scale, pragmatic studies such as LiTMUS.

Faasse, K., T. Cundy, et al. (2013). **"The effect of an apparent change to a branded or generic medication on drug effectiveness and side effects."** *Psychosomatic Medicine* 75(1): 90-96.  
<http://www.psychosomaticmedicine.org/content/75/1/90.abstract>

Objective Generic medications are associated with reduced perceived effectiveness, increased perceived adverse effects, and increased rates of nonadherence compared with brand-name medications. This study examined the effect of an apparent medication formulation change on subjective and objective measures of medication effectiveness and medication side effects. Methods Sixty-two university students participated in a study purportedly testing the effectiveness of fast-acting  $\beta$ -blocker medications in reducing preexamination anxiety. All tablets were placebos. In session 1, all participants received a yellow tablet ("Betaprol"). In session 2, participants were randomly allocated to receive Betaprol (no change condition) or a white tablet labeled either as "Novaprol" (branded change condition) or "Generic" (generic change condition). Blood pressure and state anxiety were measured before and after tablet ingestion. Side effects attributed to medication were assessed. Results The no change group showed significantly greater decreases in systolic blood pressure (mean [M] [standard deviation] =  $-7.72$  mm Hg, standard error [SE] = 1.45) than the branded change (M =  $-2.75$  mm Hg, SE = 1.44,  $p = .02$ ) and generic change (M =  $-3.26$  mm Hg, SE = 1.45,  $p = .03$ ) groups. The no-change group showed significantly greater decreases in state anxiety (M =  $-1.53$ , SE = 0.33) than the branded change (M =  $-0.50$ , SE = 0.33,  $p = .03$ ) and generic change (M =  $-0.52$ , SE = 0.33,  $p = .04$ ) groups. Significantly more side effects were attributed to the medication in the generic change (M = 1.83, SE = 0.23) (but not the branded change) condition when compared with the no change condition (M = 0.87, SE = 0.31,  $p = .03$ ). Conclusions Medication formulation change, particularly to generic medication, seems to be associated with reduced subjective and objective measures of medication effectiveness and increased side effects.

Fluckiger, C., M. Grosse Holtforth, et al. (2013). **"Is the relation between early post-session reports and treatment outcome an epiphenomenon of intake distress and early response? A multi-predictor analysis in outpatient psychotherapy."** *Psychother Res* 23(1): 1-13. <http://www.ncbi.nlm.nih.gov/pubmed/22708616>

Abstract The early phase of psychotherapy has been regarded as a sensitive period in the unfolding of psychotherapy leading to positive outcomes. However, there is disagreement about the degree to which early (especially relationship-related) session experiences predict outcome over and above initial levels of distress and early response to treatment. The goal of the present study was to simultaneously examine outcome at post treatment as a function of (a) intake symptom and interpersonal distress as well as early change in well-being and symptoms, (b) the patient's early session-experiences, (c) the therapist's early session-experiences/interventions, and (d) their interactions. The data of 430 psychotherapy completers treated by 151 therapists were analyzed using hierarchical linear models. Results indicate that early positive intra- and interpersonal session experiences as reported by patients and therapists after the sessions explained 58% of variance of a composite outcome measure, taking intake distress and early response into account. All predictors (other than problem-activating therapists' interventions) contributed to later treatment outcomes if entered as single predictors. However, the multi-predictor analyses indicated that interpersonal distress at intake as well as the early interpersonal session experiences by patients and therapists remained robust predictors of outcome. The findings underscore that early in therapy therapists (and their supervisors) need to understand and monitor multiple interconnected components simultaneously.

Garlow, S. J., B. W. Dunlop, et al. (2012). **"The combination of triiodothyronine (T3) and sertraline is not superior to sertraline monotherapy in the treatment of major depressive disorder."** *J Psychiatr Res* 46(11): 1406-1413. <http://www.ncbi.nlm.nih.gov/pubmed/22964160>

OBJECTIVE: To determine whether the combination of triiodothyronine (T3) plus sertraline at treatment initiation confers greater antidepressant efficacy than sertraline plus placebo in patients with major depressive disorder. METHOD: Eight-week, double blind, randomized placebo controlled clinical trial of 153 adult outpatients between 18 and 60 years of age, with DSM-IV defined major depressive disorder. Patients were treated with sertraline flexibly adjusted for tolerability and in a double blind fashion with placebo or T3 (25 mug/day in week 1 and increasing to 50 mug/day in week 2). Response was defined categorically as 50% reduction and total score less than 15 in 21-item Hamilton Rating Scale for Depression (HRSD-21) at week 8 and remission as HRSD-21 less than 8. RESULTS: There was no difference between treatment groups at final assessment; 65% of placebo and 61.8% of T3 treated subjects achieved response and 50.6% of placebo and 40.8% of T3 treated patients achieved remission. The mean daily dose at final assessment of sertraline and T3, respectively was 144.7 mg (+/- 48.7 mg) and 48.2 mug (+/- 7 mug). Median time to response did not differ between treatment groups. Baseline thyroid function tests did not predict response to sertraline treatment or T3 augmentation. CONCLUSIONS: These results do not support the routine use of T3 to enhance or accelerate onset of antidepressant response in patients with major depressive disorder.

Hardeveld, F., J. Spijker, et al. (2013). **"Recurrence of major depressive disorder and its predictors in the general population: Results from the Netherlands mental health survey and incidence study (NEMESIS)."** *Psychological Medicine* 43(01): 39-48. <http://dx.doi.org/10.1017/S0033291712002395>

Background Knowledge of the risk of recurrence after recovery from major depressive disorder (MDD) in the general population is scarce. Method Data were derived from 687 subjects in the general population with a lifetime DSM-III-R diagnosis of MDD but without a current major depressive episode (MDE) or dysthymia. Participants had to be at least 6 months in remission, and were recruited from The Netherlands Mental Health Survey and Incidence Study (NEMESIS), using the Composite International Diagnostic Interview (CIDI). Recency and severity of the last MDE were assessed retrospectively at baseline. Recurrence of MDD was measured prospectively during the 3-year follow-up. Kaplan-Meier survival curves were used to measure time to recurrence. Determinants of time to recurrence were analyzed using proportional hazard models. Results The estimated cumulative recurrence of MDD was 13.2% at 5 years, 23.2% at 10 years and 42.0% at 20 years. In bivariate analysis, the following variables predicted a shorter time to recurrence: younger age, younger age of onset, higher number of previous episodes, a severe last depressive episode, negative youth experiences, ongoing difficulties before recurrence and high neuroticism. Multivariably, younger age, a higher number of previous episodes, a severe last depressive episode, negative youth experiences and ongoing difficulties remained significant. Conclusions In this community sample, the long-term risk of recurrence was high, but lower than that found in clinical samples. Subjects who had had an MDE had a long-term vulnerability for recurrence. Factors predicting recurrence included illness- and stress-related factors.

Hetrick, S. E., J. E. McKenzie, et al. (2012). **"Newer generation antidepressants for depressive disorders in children and adolescents."** *Cochrane Database Syst Rev* 11: CD004851. <http://www.ncbi.nlm.nih.gov/pubmed/23152227>

BACKGROUND: Depressive disorders are common in young people and are associated with significant negative impacts. Newer generation antidepressants, particularly selective serotonin reuptake inhibitors (SSRIs), are often used, however evidence of their effectiveness in children and adolescents is not clear. Furthermore, there have been warnings against their use in this population due to concerns about increased risk of suicidal ideation and behaviour. OBJECTIVES: To determine the efficacy and adverse outcomes, including definitive suicidal behaviour and suicidal ideation, of newer generation antidepressants compared with placebo in the treatment of depressive disorders in children and adolescents. SEARCH METHODS: For this update of the review, we searched the Cochrane Depression, Anxiety and Neurosis Review Group's Specialised Register (CCDANCTR) to October 2011. The CCDANCTR includes relevant randomised controlled trials from the following bibliographic databases: CENTRAL (the Cochrane Central Register of Controlled Trials) (all years), EMBASE (1974 -), MEDLINE (1950 -) and PsycINFO (1967 -). We searched clinical trial registries and pharmaceutical company websites. We checked reference lists of included trials and other reviews, and sent letters to key researchers and the pharmaceutical companies of included trials from January to August 2011. SELECTION CRITERIA: Published and unpublished randomised controlled trials (RCTs), cross-over trials and cluster trials comparing a newer generation antidepressant with a placebo in children and adolescents aged 6 to 18 years old and diagnosed with a depressive disorder were eligible for inclusion. In this update, we amended the selection criteria to include newer generation antidepressants rather than SSRIs only. DATA COLLECTION AND ANALYSIS: Two or three review authors selected the trials, assessed their quality, and extracted trial and outcome data. We used a random-effects meta-analysis. We used risk ratio (RR) to summarise dichotomous outcomes and mean difference (MD) to summarise continuous measures. MAIN RESULTS: Nineteen trials of a range of newer antidepressants compared with placebo, containing 3335 participants, were included. The trials excluded young people at high risk of suicide and many co-morbid conditions and the participants are likely to be less unwell than those seen in clinical practice. We judged none of these trials to be at low risk of bias, with limited information about many aspects of risk of bias, high drop out rates and issues regarding measurement instruments and the clinical usefulness of outcomes, which were often variously defined across trials. Overall, there was evidence that those treated with an antidepressant had lower depression severity scores and higher rates of response/remission than those on placebo. However, the size of these effects was small with a reduction in depression symptoms of 3.51 on a scale from 17 to 113 (14 trials; N = 2490; MD -3.51; 95% confidence interval (CI) -4.55 to -2.47). Remission rates increased from 380 per 1000 to 448

per 1000 for those treated with an antidepressant. There was evidence of an increased risk (58%) of suicide-related outcome for those on antidepressants compared with a placebo (17 trials; N = 3229; RR 1.58; 95% CI 1.02 to 2.45). This equates to an increased risk in a group with a median baseline risk from 25 in 1000 to 40 in 1000. Where rates of adverse events were reported, this was higher for those prescribed an antidepressant. There was no evidence that the magnitude of intervention effects (compared with placebo) were modified by individual drug class. **AUTHORS' CONCLUSIONS:** Caution is required in interpreting the results given the methodological limitations of the included trials in terms of internal and external validity. Further, the size and clinical meaningfulness of statistically significant results are uncertain. However, given the risks of untreated depression in terms of completed suicide and impacts on functioning, if a decision to use medication is agreed, then fluoxetine might be the medication of first choice given guideline recommendations. Clinicians need to keep in mind that there is evidence of an increased risk of suicide-related outcomes in those treated with antidepressant medications.

Jacka, F. N., J. A. Pasco, et al. (2012). **"Dietary intake of fish and PUFA, and clinical depressive and anxiety disorders in women."** *Br J Nutr*: 1-8. <http://www.ncbi.nlm.nih.gov/pubmed/23051591>

Fish and PUFA consumption are thought to play a role in mental health; however, many studies do not take into account multiple sources of PUFA. The present study analysed data from a sample of 935 randomly selected, population-based women aged 20-93 years. A validated and comprehensive dietary questionnaire ascertained the consumption of n-3 and n-6 PUFA. Another assessed fish and energy intake and provided data for a dietary quality score. The General Health Questionnaire-12 (GHQ-12) measured psychological symptoms and a clinical interview (Structured Clinical Interview for DSM-IV-TR Research Version, Non-patient edition) assessed depressive and anxiety disorders. Median dietary intakes of long-chain n-3 fatty acids (310 mg/d) were below suggested dietary target levels. The only PUFA related to categorical depressive and anxiety disorders was DHA. There was a non-linear relationship between DHA intake and depression; those in the second tertile of DHA intake were nearly 70 % less likely to report a current depressive disorder compared to those in the first tertile. The relationship of DHA to anxiety disorders was linear; for those in the highest tertile of DHA intake, the odds for anxiety disorders were reduced by nearly 50 % after adjustments, including adjustment for diet quality scores, compared to the lowest tertile. Those who ate fish less than once per week had higher GHQ-12 scores, and this relationship was particularly obvious in smokers. These are the first observational data to indicate a role for DHA in anxiety disorders, but suggest that the relationship between DHA and depressive disorders may be non-linear.

Jacka, F. N., C. Rethon, et al. (2012). **"Diet quality and mental health problems in adolescents from East London: A prospective study."** *Soc Psychiatry Psychiatr Epidemiol*. <http://www.ncbi.nlm.nih.gov/pubmed/23160714>

**PURPOSE:** In this study, we aimed to examine the relationship between diet quality and depression in a prospective study of adolescents from varied ethnic and cultural backgrounds. **DESIGN:** In this prospective cohort study, data were collected at two time points (2001 and 2003) from nearly 3,000 adolescents, aged either 11-12 years or 13-14 years, participating in RELACHS, a study of ethnically diverse and socially deprived young people from East London in the UK. Diet quality was measured from dietary questionnaires, and mental health assessed using the Strengths and Difficulties Questionnaire (SDQ) and the Short Mood and Feelings Questionnaire (SMFQ). **RESULTS:** In cross-sectional analyses, we found evidence for an association between an unhealthy diet and mental health problems. Compared to those in the lowest quintile of Unhealthy diet score, those in the highest quintile were more than twice as likely to be symptomatic on the SDQ (OR 2.10, 95 %CI 1.38-3.20) after taking all identified confounders into account. There was also some evidence for a cross-sectional inverse association between a measure of healthy diet and mental health problems. A prospective relationship between the highest quintiles of both Healthy (OR 0.63, 95 %CI 0.38-1.05) and Unhealthy (OR 1.75, 95 %CI 1.00-3.06) diet scores and SDQ scores at follow-up was also evident, but was attenuated by final adjustments for confounders. **CONCLUSION:** This study is concordant with previous observational studies in describing relationships between measures of diet quality and mental health problems in adolescents.

Kelleher, I., F. Lynch, et al. (2012). **"Psychotic symptoms in adolescence index risk for suicidal behavior: Findings from 2 population-based case-control clinical interview studies."** *Archives of General Psychiatry* 69(12): 1277-1283. <http://dx.doi.org/10.1001/archgenpsychiatry.2012.164>

**Context** Recent evidence from both clinical and population research has pointed to psychotic symptoms as potentially important markers of risk for suicidal behavior. However, to our knowledge, there have been no epidemiological studies to date that have reported data on psychotic symptoms and suicidality in individuals who have been clinically assessed for suicidal behavior. **Objectives** To explore associations between psychotic symptoms in nonpsychotic adolescents and risk for suicidal behavior in (1) the general population, (2) adolescents with psychiatric disorder, and (3) adolescents with suicidal ideation. **Design** Two independently conducted case-control clinical interview studies. **Setting** Population-based studies in Ireland. **Participants** Study 1 included 212 adolescents aged 11 to 13 years. Study 2 included 211 adolescents aged 13 to 15 years. **Participants** were recruited from schools. **Main Outcome Measures** Suicidal behavior and psychotic symptoms, assessed by semi-structured diagnostic clinical interview. **Results** Psychotic symptoms were associated with a 10-fold increased odds of any suicidal behavior (ideation, plans, or acts) in both the early and middle adolescence studies (odds ratio [OR], 10.23; 95% CI, 3.25-32.26; P<.001 and OR, 10.5; 95% CI, 3.14-35.17; P<.001, respectively). Adolescents with depressive disorders who also experienced psychotic symptoms were at a nearly 14-fold increased odds of more severe suicidal behavior (suicide plans and suicide acts) compared with adolescents with depressive disorders who did not experience psychotic symptoms (OR, 13.7; 95% CI, 2.1-89.6). Among all adolescents with suicidal ideation, those who also reported psychotic symptoms had a nearly 20-fold increased odds of suicide plans and suicide acts compared with adolescents with suicidal ideation who did not report psychotic symptoms (OR, 19.6; 95% CI, 1.8-216.1). **Conclusions** Psychotic symptoms are strongly associated with increased risk for suicidal behavior in the general adolescent population and in adolescents with (nonpsychotic) psychiatric disorder. In both studies, an absolute majority of adolescents with more severe suicidal behavior (suicidal plans and acts) reported psychotic symptoms when directly questioned about this as part of a psychiatric interview. Assessment of psychotic symptoms should form a key part of suicide risk assessment.

Lutz, W., T. Ehrlich, et al. (2012). **"The ups and downs of psychotherapy: Sudden gains and sudden losses identified with session reports."** *Psychotherapy Research* 23(1): 14-24. <http://dx.doi.org/10.1080/10503307.2012.693837>

Psychotherapy does not always follow a linear path. The present study explores the frequency of sudden gains and losses during the course of outpatient psychotherapy. The sample includes 1500 patients treated at three different outpatient centers. The patients were 57.4% female, and suffered primarily from anxiety and depressive disorders. Progress was measured by session reports. Significant sudden shifts in both directions were prevalent for 28.9% of the patients. Patients with early sudden gains showed the highest effect sizes and patients with sudden losses showed the smallest at the end of treatment. The therapeutic relationship was significantly better after the sudden gain sessions. Results suggest further investigation of the occurrence of sudden gains in relation to early response as well as further exploration of sudden losses during the course of treatment with respect to differential patterns of change and outcome.

McMartin, S. E., F. N. Jacka, et al. (2013). **"The association between fruit and vegetable consumption and mental health disorders: Evidence from five waves of a national survey of Canadians."** *Prev Med* 56(3-4): 225-230. <http://www.ncbi.nlm.nih.gov/pubmed/23295173>

**OBJECTIVE:** The objective of this study was to examine the association between fruit and vegetable intake (FVI) and mental health disorders. **METHOD:** This study used data from the Canadian Community Health Survey (CCHS), a repeated cross-sectional study of Canadians with five waves between 2000 until 2009 (n=296,121 aged 12 years or older). FVI was assessed based on frequency of consumption. The primary outcome was a major depressive episode over the previous 12 months. Logistic regression models adjusted for age, gender, household income, education, physical activity, chronic illness and smoking. **RESULTS:** In the first wave, greater FVI was significantly associated with lower odds of depression (OR: 0.85 95% CI: 0.78-0.92). A combined estimate of all 5 waves demonstrated similar results (OR: 0.72; 95% CI: 0.71-0.75). Relative to those with the lowest FVI, those with the greatest FVI also had significantly lower odds of suffering from distress (OR: 0.87 95% CI: 0.78-0.98). These results were consistent across other waves. Perceived poor mental health status and previous diagnosis of a mood disorder and anxiety disorder also demonstrated statistically significant inverse associations with FVI (all p<0.05). **CONCLUSION:** These findings suggest a potentially important role of a healthy diet in the prevention of depression and anxiety.

Nierenberg, A. A., E. S. Friedman, et al. (2013). **"Lithium treatment moderate-dose use study (LITMUS) for bipolar disorder: A randomized comparative effectiveness trial of optimized personalized treatment with and without lithium."** *Am J Psychiatry* 170(1): 102-110. <http://www.ncbi.nlm.nih.gov/pubmed/23288387>

**OBJECTIVE:** Lithium salts, once the mainstay of therapy for bipolar disorder, have tolerability issues at a higher dosage that often limit adherence. The authors investigated the comparative effectiveness of more tolerable dosages of lithium as part of optimized personalized treatment (OPT). **METHOD:** The authors randomly assigned 283 bipolar disorder outpatients to 6 months of open, flexible, moderate dosages of lithium plus OPT or to 6 months of OPT alone. The primary outcome measures were the Clinical Global Impression Scale for Bipolar Disorder-Severity (CGI-BP-S) and "necessary clinical adjustments" (medication adjustments per month). Secondary outcome measures included mood symptoms and functioning. The authors also assessed sustained remission (defined as a CGI-BP-S score  $\leq$  2 for 2 months) and treatment with second-generation antipsychotics. The authors hypothesized that lithium plus OPT would result in greater clinical improvement and fewer necessary clinical adjustments. **RESULTS:** The authors observed no statistically significant advantage of lithium plus OPT on CGI-BP-S scores, necessary clinical adjustments, or proportion with sustained remission. Both groups had similar outcomes across secondary clinical and functional measures. Fewer patients in the lithium-plus-OPT group received second-generation antipsychotics compared with the OPT-only group (48.3% and 62.5%, respectively). **CONCLUSIONS:** In this pragmatic comparative effectiveness study, a moderate but tolerated dosage of lithium plus OPT conferred no symptomatic advantage when compared with OPT alone, but the lithium-plus-OPT group had less exposure to second-generation antipsychotics. Only about one-quarter of patients in both groups achieved sustained remission of symptoms. These findings highlight the persistent and chronic nature of bipolar disorder as well as the magnitude of unmet needs in its treatment.

Norton, S., T. Cosco, et al. (2013). **"The hospital anxiety and depression scale: A meta confirmatory factor analysis."** *Journal of Psychosomatic Research* 74(1): 74-81. <http://www.sciencedirect.com/science/article/pii/S0022399912003054>

**Objective** To systematically evaluate the latent structure of the Hospital Anxiety and Depression Scale (HADS) through reanalysis of previous studies and meta confirmatory factor analysis (CFA). **Method** Data from 28 samples were obtained from published studies concerning the latent structure of the HADS. Ten models were considered, including eight previously identified models and two bifactor models. The fit of each model was assessed separately in each sample and by meta CFA. Meta CFA was conducted using all samples and using subgroups consisting of community samples, cardiovascular disease samples and samples from studies administering the English language version of the HADS. **Results** A bifactor model including all items loading onto a general distress factor and two orthogonal anxiety and depression group factors provided the best fit for the majority of samples. Meta CFA provided further support for the bifactor model with two group factors. This was the case using all samples, as well as all subgroup analyses. The general distress factor explained 73% of the covariance between items, with the (autonomic) anxiety and (anhedonic) depression factors explaining 11% and 16%, respectively. **Conclusion** A bifactor structure provides the most acceptable empirical explanation for the HADS correlation structure. Due to the presence of a strong general factor, the HADS does not provide good separation between symptoms of anxiety and depression. We recommend it is best used as a measure of general distress.

Owen, J., R. J. Reese, et al. (2012). **"Alliance in action: A new measure of clients' perceptions of therapists' alliance activity."** *Psychotherapy Research* 23(1): 67-77. <http://dx.doi.org/10.1080/10503307.2012.731088>

We developed a new measure, Alliance in Action (AiA), which assesses clients' perceptions of therapist behavior related to fostering and maintaining the alliance. Clients (N=170) were treated by 42 therapists. All clients were currently in therapy. The results of a factor analysis revealed four subscales to the AiA, which reflected clients' perceptions of their therapists' behavior to monitor the therapeutic relationship, the goals for therapy, and progress towards client goals. A fourth subscale emerged that reflected clients' perceptions of therapist avoidance of eliciting feedback. The AiA subscales demonstrated alphas above .70 and they were associated with client-rated alliance and session outcomes in univariate correlation tests. In multilevel models, three of the four subscales were associated with alliance and session outcomes. The AiA may be helpful in understanding how the therapeutic alliance functions in therapy.

Radhakrishnan, M., G. Hammond, et al. (2013). **"Cost of improving access to psychological therapies (IAPT) programme: An analysis of cost of session, treatment and recovery in selected primary care trusts in the East of England region."** *Behaviour Research and Therapy* 51(1): 37-45. <http://www.sciencedirect.com/science/article/pii/S0005796712001556>

(Free full text available) Recent literature on Improving Access to Psychological Therapies (IAPT) has reported on improvements in clinical outcomes, changes in employment status and the concept of recovery attributable to IAPT treatment, but not on the costs of the programme. This article reports the costs associated with a single session, completed course of treatment and recovery for four treatment courses (i.e., remaining in low or high intensity treatment, stepping up or down) in IAPT services in 5 East of England region Primary Care Trusts. Costs were estimated using treatment activity data and gross financial information, along with assumptions about how these financial data could be broken down. The estimated average cost of a high intensity session was £177 and the average cost for a low intensity session was £99. The average cost of treatment was £493 (low intensity), £1416 (high intensity), £699 (stepped down), £1514 (stepped up) and £877 (All). The cost per recovered patient was £1043 (low intensity), £2895 (high intensity), £1653 (stepped down), £2914 (stepped up) and £1766 (All). Sensitivity analysis revealed that the costs are sensitive to cost ratio assumptions, indicating that inaccurate ratios are likely to influence overall estimates. Results indicate the cost per session exceeds previously reported estimates, but cost of treatment is only marginally higher. The current cost estimates are supportive of the originally proposed IAPT model on cost-benefit grounds. The study also provides a framework to estimate costs using financial data, especially when programmes have

block contract arrangements. Replication and additional analyses along with evidence-based discussion regarding alternative, cost-effective methods of intervention is recommended.

Rawal, A., S. Collishaw, et al. (2013). **"The risks of playing it safe': A prospective longitudinal study of response to reward in the adolescent offspring of depressed parents."** *Psychological Medicine* 43(01): 27-38. <http://dx.doi.org/10.1017/S0033291712001158>

**Background** Alterations in reward processing may represent an early vulnerability factor for the development of depressive disorder. Depression in adults is associated with reward hyposensitivity and diminished reward seeking may also be a feature of depression in children and adolescents. We examined the role of reward responding in predicting depressive symptoms, functional impairment and new-onset depressive disorder over time in the adolescent offspring of depressed parents. In addition, we examined group differences in reward responding between currently depressed adolescents, psychiatric and healthy controls, and also cross-sectional associations between reward responding and measures of positive social/environmental functioning. **Method** We conducted a 1-year longitudinal study of adolescents at familial risk for depression (n = 197; age range 10–18 years). Reward responding and self-reported social/environmental functioning were assessed at baseline. Clinical interviews determined diagnostic status at baseline and at follow-up. Reports of depressive symptoms and functional impairment were also obtained. **Results** Low reward seeking predicted depressive symptoms and new-onset depressive disorder at the 1-year follow-up in individuals free from depressive disorder at baseline, independently of baseline depressive symptoms. Reduced reward seeking also predicted functional impairment. Adolescents with current depressive disorder were less reward seeking (i.e. bet less at favourable odds) than adolescents free from psychopathology and those with externalizing disorders. Reward seeking showed positive associations with social and environmental functioning (extra-curricular activities, humour, friendships) and was negatively associated with anhedonia. There were no group differences in impulsivity, decision making or psychomotor slowing. **Conclusions** Reward seeking predicts depression severity and onset in adolescents at elevated risk of depression. Adaptive reward responses may be amenable to change through modification of existing preventive psychological interventions.

Sanchez-Villegas, A., A. E. Field, et al. (2013). **"Perceived and actual obesity in childhood and adolescence and risk of adult depression."** *J Epidemiol Community Health* 67(1): 81-86. <http://www.ncbi.nlm.nih.gov/pubmed/22766776>

**BACKGROUND:** Obesity in childhood and adolescence has important health consequences, but its relation to risk of adult depression remains uncertain. **OBJECTIVE:** To examine the effect of perceived and actual obesity during childhood and adolescence on prevalence and incidence of adult depression risk. **METHODS:** Cohort study of 91,798 female registered nurses followed longitudinally for 12 years. **RESULTS:** As compared with lean women of the same age, women in the two highest categories of body shape at age 10 had both higher prevalence (OR=2.59, 95% CI 1.46 to 4.61) and incidence (OR=2.01, 95% CI 1.08 to 3.71) of depression. Similar results were obtained for body shape at age 20 (OR=3.43 for prevalence and OR=2.03 for incidence) and for body mass index (BMI) at age 18 (OR=2.92 for BMI  $\geq$  40 kg/m<sup>2</sup>). These associations remained significant after adjustment for multiple confounders. **CONCLUSION:** These results indicate that childhood-adolescence obesity is a strong and independent risk factor for adult depression.

Sanchez-Villegas, A. and M. Martinez-Gonzalez (2013). **"Diet, a new target to prevent depression?"** *BMC Medicine* 11(1): 3. <http://www.biomedcentral.com/1741-7015/11/3>

(Available in free full text): **BACKGROUND:** Research on the role of diet in the prevention of depression is scarce. Some evidence suggests that depression shares common mechanisms with cardiovascular disease. **DISCUSSION:** Before considering the role of diet in the prevention of depression, several points need to be considered. First, in general, evidence has been found for the effects of isolated nutrients or foods, and not for dietary patterns. Second, most previous studies have a cross-sectional design. Third, information is generally collected through questionnaires, increasing the risk of misclassification bias. Fourth, adequate control of confounding factors in observational studies is mandatory. **SUMMARY:** Only a few cohort studies have analyzed the relationship between overall dietary patterns, such as the Mediterranean diet, and primary prevention of depression. They have found similar results to those obtained for the role of this dietary pattern in cardiovascular disease. To confirm the findings obtained in these initial cohort studies, we need further observational longitudinal studies with improved methodology, as well as large randomized primary prevention trials, with interventions based on changes in the overall food pattern, that include participants at high risk of mental disorders.

Stephansson, O., H. Kieler, et al. (2013). **"Selective serotonin reuptake inhibitors during pregnancy and risk of stillbirth and infant mortality."** *JAMA* 309(1): 48-54. <http://dx.doi.org/10.1001/jama.2012.153812>

**Importance** Maternal psychiatric disease is associated with adverse pregnancy outcomes. Use of selective serotonin reuptake inhibitors (SSRIs) during pregnancy has been associated with congenital anomalies, neonatal withdrawal syndrome, and persistent pulmonary hypertension of the newborn. However, the risk of stillbirth and infant mortality when accounting for previous maternal psychiatric disease remains unknown. **Objective** To study risk of stillbirth and infant mortality associated with use of SSRIs during pregnancy. **Design, Setting, and Participants** Population-based cohort study from all Nordic countries (Denmark, Finland, Iceland, Norway, and Sweden) at different periods from 1996 through 2007. The study included women with singleton births. We obtained information on maternal use of SSRIs from prescription registries. Maternal characteristics, pregnancy, and neonatal outcomes were obtained from patient and medical birth registries. **Main Outcome Measures** We used logistic regression to estimate relative risks of stillbirth, neonatal death, and postneonatal death associated with SSRI use during pregnancy taking into account maternal characteristics and previous psychiatric hospitalization. **Results** Among 1 633 877 singleton births in the study, 6054 were stillbirths; 3609, neonatal deaths; and 1578, postneonatal deaths. A total of 29 228 (1.79%) of mothers had filled a prescription for an SSRI during pregnancy. Women exposed to an SSRI presented with higher rates of stillbirth (4.62 vs 3.69 per 1000, P = .01) and postneonatal death (1.38 vs 0.96 per 1000, P = .03) than those who did not. The rate of neonatal death was similar between groups (2.54 vs 2.21 per 1000, P = .24). Yet in multivariable models, SSRI use was not associated with stillbirth (adjusted odds ratio [OR], 1.17; 95% CI, 0.96-1.41; P = .12), neonatal death (adjusted OR, 1.23; 95% CI, 0.96-1.57; P = .11), or postneonatal death (adjusted OR, 1.34; 95% CI, 0.97-1.86; P = .08). Estimates were further attenuated when stratified by previous hospitalization for psychiatric disease. The adjusted OR for stillbirth in women with a previous hospitalization for psychiatric disease was 0.92 (95% CI, 0.66-1.28; P = .62) and was 1.07 (95% CI, 0.84-1.36; P = .59) for those who had not been previously hospitalized. The corresponding ORs for neonatal death were 0.89 (95% CI, 0.58-1.39; P = .62) for women who were hospitalized and 1.14 (95% CI, 0.84-1.56; P = .39) for women who were not. For postneonatal death, the ORs were 1.02 (95% CI, 0.61-1.69; P = .95) for women who were hospitalized and 1.10 (95% CI, 0.71-1.72; P = .66) for women who were not. **Conclusions and Relevance** Among women with singleton births in Nordic countries, no significant association was found between use of SSRIs during pregnancy and risk of stillbirth, neonatal mortality, or postneonatal mortality. However, decisions about use of SSRIs during pregnancy must take into account other perinatal outcomes and the risks associated with maternal mental illness.

Sturt, J., S. Ali, et al. (2012). **"Neurolinguistic programming: A systematic review of the effects on health outcomes."** *Br J Gen Pract* 62(604): e757-764. <http://www.ncbi.nlm.nih.gov/pubmed/23211179>

**BACKGROUND:** Neurolinguistic programming (NLP) in health care has captured the interest of doctors, healthcare professionals, and managers. **AIM:** To evaluate the effects of NLP on health-related outcomes. **DESIGN AND SETTING:** Systematic review of experimental studies. **METHOD:** The following data sources were searched: MEDLINE, PsycINFO, ASSIA, AMED, CINAHL, Web of Knowledge, CENTRAL, NLP specialist databases, reference lists, review articles, and NLP professional associations, training providers, and research groups. **RESULTS:** Searches revealed 1459 titles from which 10 experimental studies were included. Five studies were randomised controlled trials (RCTs) and five were pre-post studies. Targeted health conditions were anxiety disorders, weight maintenance, morning sickness, substance misuse, and claustrophobia during MRI scanning. NLP interventions were mainly delivered across 4-20 sessions although three were single session. Eighteen outcomes were reported and the RCT sample sizes ranged from 22 to 106. Four RCTs reported no significant between group differences with the fifth finding in favour of the NLP arm ( $F = 8.114, P < 0.001$ ). Three RCTs and five pre-post studies reported within group improvements. Risk of bias across all studies was high or uncertain. **CONCLUSION:** There is little evidence that NLP interventions improve health-related outcomes. This conclusion reflects the limited quantity and quality of NLP research, rather than robust evidence of no effect. There is currently insufficient evidence to support the allocation of NHS resources to NLP activities outside of research purposes.

Sylvia, L. G., A. T. Peters, et al. (2013). **"Nutrient-based therapies for bipolar disorder: A systematic review."** *Psychother Psychosom* 82(1): 10-19. <http://www.ncbi.nlm.nih.gov/pubmed/23147067>

**BACKGROUND:** Pharmacotherapy is the first line of treatment for bipolar disorder, but many patients continue to experience persistent subthreshold symptoms. Alternative adjunct treatments, including nutritional therapies, may have the potential to alleviate residual symptoms and improve the outcomes of standard pharmacotherapy. The aim of this paper is to critically review the current clinical evidence and mechanisms of action of nutrient-based therapies alone or in combination with commonly used pharmacotherapies for mania and bipolar depression. **METHODS:** We conducted a Medline search for clinical trials conducted with humans, published in English from 1960 to 2012 using nutritional supplements such as n-3, chromium, inositol, choline, magnesium, folate and tryptophan alone or in combination with pharmacotherapies for the treatment of bipolar disorder. **RESULTS:** Preliminary data yields conflicting but mainly positive evidence for the use of n-3 fatty acids and chromium in the treatment of bipolar depression. Limited evidence found that inositol may be helpful for bipolar depression, but larger sample sizes are needed. Preliminary randomized, controlled trials suggest that choline, magnesium, folate and tryptophan may be beneficial for reducing symptoms of mania. **CONCLUSIONS:** Given the potential public health impact of identifying adjunct treatments that improve psychiatric as well as physical health outcomes, nutritional treatments appear promising for the management of bipolar disorder but require further study.

Vinson, D. C., B. J. Turner, et al. (2013). **"Clinician suspicion of an alcohol problem: An observational study from the aafp national research network."** *The Annals of Family Medicine* 11(1): 53-59. <http://www.annfam.org/content/11/1/53.abstract>

**PURPOSE** In clinical practice, detection of alcohol problems often relies on clinician suspicion instead of using a screening instrument. We assessed the sensitivity, specificity, and predictive values of clinician suspicion compared with screening-detected alcohol problems in patients. **METHODS** We undertook a cross-sectional study of 94 primary care clinicians' office visits. Brief questionnaires were completed separately after a visit by both clinicians and eligible patients. The patient's anonymous exit questionnaire screened for hazardous drinking based on the Alcohol Use Disorders Identification Test-Consumption (AUDIT-C) and for harmful drinking (alcohol abuse or dependence) based on 2 questions from the Diagnostic and Statistical Manual of Mental Disorders. After the visit, clinicians responded to the question, "Does this patient have problems with alcohol?" with answer options including "yes, hazardous drinking" and "yes, alcohol abuse or dependence." Analyses assessed the associations between patients' responses to screening questions and clinician's suspicions. **RESULTS** Of 2,518 patients with an office visit, 2,173 were eligible, and 1,699 (78%) completed the exit questionnaire. One hundred seventy-one (10.1%) patients had a positive screening test for hazardous drinking (an AUDIT-C score of 5 or greater) and 64 (3.8%) for harmful drinking. Clinicians suspected alcohol problems in 81 patients (hazardous drinking in 37, harmful drinking in 40, and both in 4). The sensitivity of clinician suspicion of either hazardous or harmful drinking was 27% and the specificity was 98%. Positive and negative predictive values were 62% and 92%, respectively. **CONCLUSION** Clinician suspicion of alcohol problems had poor sensitivity but high specificity for identifying patients who had a positive screening test for alcohol problems. These data support the routine use of a screening tool to supplement clinicians' suspicions, which already provide reasonable positive predictive value. *(Although incorporating routine screening into primary care is not easy, there are ways to make it simpler, according to the authors. "To increase the feasibility of screening for alcohol problems in practice, a validated single screening question can be used. For example, for the question, "When was the last time you had more than X drinks in one day?" where X is 4 for women and 5 for men, an answer of any time in the past 3 months was 86% sensitive and 86% specific in detecting alcohol problems compared with a structured, researcher-administered interview.")*

Werner-Seidler, A., R. Banks, et al. (2013). **"An investigation of the relationship between positive affect regulation and depression."** *Behaviour Research and Therapy* 51(1): 46-56. <http://www.sciencedirect.com/science/article/pii/S0005796712001623>

(Free full text available) There is preliminary evidence that dysphoric symptoms are associated with maladaptive regulation of positive emotion. We investigated to what extent this pattern is unique to depression symptoms, persists in recovery, and extends to apprehension of intense emotion experience. In Study 1, in a sample of undergraduates ( $N = 112$ ), dysphoria was associated with apprehension about experiencing intense emotion and dampening of positive emotion. Reductions in the amplification of positive emotion experience were uniquely associated with anhedonic depressive symptoms. Study 2 compared a recovered depressed and never-depressed student sample ( $N = 123$ ), and found that recovered individuals reported using more maladaptive responses to positive affect. In Study 3 we examined community-recruited depressed, recovered and never-depressed groups ( $N = 50$ ), and found that depressed individuals reported a greater tendency to dampen positive emotion than their never-depressed counterparts, but did not significantly differ from recovered depressed individuals. Greater dampening and reduced amplification of positive experience were again uniquely associated with anhedonic depressive symptoms. Our findings converge on the proposal that current depressive symptoms, rather than a history of depression, are more strongly linked to difficulties with emotion regulation, and suggest that targeting positive emotion could reduce anhedonia and improve treatment outcomes.

Wiles, N. J., A. M. Haase, et al. (2012). **"Physical activity and depression in adolescents: Cross-sectional findings from the ALSPAC cohort."** *Soc Psychiatry Psychiatr Epidemiol* 47(7): 1023-1033. <http://www.ncbi.nlm.nih.gov/pubmed/21826444>

**PURPOSE:** Few studies have examined the association between physical activity (PA), measured objectively, and adolescent depressive symptoms. The aim of this study was to determine whether there is an association between objective

measures of PA (total PA and time spent in moderate and vigorous PA (MVPA)) and adolescent depressive symptoms. METHODS: Data on 2,951 adolescents participating in ALSPAC were used. Depressive symptoms were measured using the self-report Mood and Feelings Questionnaire (MFQ) (short version). Measures of PA were based on accelerometry. The association between PA and MFQ scores was modelled using ordinal regression. RESULTS: Adolescents who were more physically active (total PA or minutes of MVPA) had a reduced odds of depressive symptoms [OR(adj) total PA (tertiles): medium 0.82 (95% CI: 0.69, 0.97); high 0.69 (95% CI: 0.57, 0.83)]; OR(adj) per 15 min MVPA: 0.92 (95% CI: 0.86, 0.98). In a multivariable model including both total PA and the percentage of time spent in MVPA, total PA was associated with depressive symptoms (OR(adj) total PA (tertiles): medium 0.82 (95% CI: 0.70, 0.98); high 0.70 (95% CI: 0.58, 0.85) but the percentage of time spent in MVPA was not independently associated with depressive symptoms [OR(adj) MVPA (tertiles) medium 1.05 (95% CI: 0.88, 1.24), high 0.91 (95% CI: 0.77, 1.09)]. CONCLUSIONS: The total amount of PA undertaken was associated with adolescent depressive symptoms, but the amount of time spent in MVPA, once total PA was accounted for, was not. If confirmed in longitudinal studies and randomised controlled trials, this would have important implications for public health messages.

Williams, C., P. Wilson, et al. (2013). **"Guided self-help cognitive behavioural therapy for depression in primary care: A randomised controlled trial."** *PLoS One* 8(1): e52735. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3543408/>

(Free full text available) BACKGROUND: Access to Cognitive behavioural therapy (CBT) for depression is limited. One solution is CBT self-help books. Trial Objectives: To assess the impact of a guided self-help CBT book (GSH-CBT) on mood, compared to treatment as usual (TAU). Hypotheses: GSH-CBT will have improved mood and knowledge of the causes and treatment of depression compared to the control receiving TAU. Guided self-help will be acceptable to patients and staff. METHODS AND FINDINGS: Participants: Adults attending seven general practices in Glasgow, UK with a BDI-II score of  $\geq 14$ . 141 randomised to GSH-CBT and 140 to TAU. Interventions: RCT comparing 'Overcoming Depression: A Five Areas Approach' book plus 3-4 short face to face support appointments totalling up to 2 hours of guided support, compared with general practitioner TAU. Primary outcome: The BDI (II) score at 4 months. Numbers analysed: 281 at baseline, 203 at 4 months (primary outcome), 117 at 12 months. Outcome: Mean BDI-II scores were lower in the GSH-CBT group at 4 months by 5.3 points (2.6 to 7.9,  $p < 0.001$ ). At 4 and 12 months there were also significantly higher proportions of participants achieving a 50% reduction in BDI-II in the GSH-CBT arm. The mean support was 2 sessions with 42.7 minutes for session 1, 41.4 minutes for session 2 and 40.2 minutes of support for session 3. Adverse effects/Harms: Significantly less deterioration in mood in GSH-CBT (2.0% compared to 9.8% in the TAU group for BDI-II category change). LIMITATIONS: Weaknesses: Our follow-up rate of 72.2% at 4 months is better than predicted but is poorer at 12 months (41.6%). In the GSH-CBT arm, around 50% of people attended 2 or fewer sessions. 22% failed to take up treatment. CONCLUSIONS: GSH-CBT is substantially more effective than TAU.