

# **36 cbt & psychotherapy relevant abstracts** **march '17 newsletter**

(Brabyn, Araya et al. 2016; Gariépy, Honkaniemi et al. 2016; Hallgren, Helgadóttir et al. 2016; Hearing, Chang et al. 2016; Hedman, Axelsson et al. 2016; Karakurt, Whiting et al. 2016; Kooole and Tschacher 2016; Malhi and Byrow 2016; Manes, Nodop et al. 2016; Mojtabai, Olfson et al. 2016; Morgan, Chittleborough et al. 2016; Murray, Merritt et al. 2016; Palmier-Claus, Berry et al. 2016; Ravindran, Balneaves et al. 2016; Redmore, Kipping et al. 2016; Riecher-Rössler 2016; Shackman, Tromp et al. 2016; Skapinakis, Caldwell et al. 2016; Slagt, Dubas et al. 2016; Trevis, McLachlan et al. 2016; Acierno, Knapp et al. 2017; Agras, Fitzsimmons-Craft et al. 2017; Asarnow and Ougrin 2017; Berger, Urech et al. 2017; Cristea, Gentili et al. 2017; Debrot, Meuwly et al. 2017; Fairburn and Patel 2017; Goodyer, Reynolds et al. 2017; Jacka, O'Neil et al. 2017; Kamenov, Twomey et al. 2017; Karukivi, Vahlberg et al. 2017; Neufeld, Dunn et al. 2017; Priebe, Ramjaun et al. 2017; Rice, Eyre et al. 2017; Schaakxs, Comijs et al. 2017; Stansfeld, Clark et al. 2017)

Acierno, R., R. Knapp, et al. (2017). **"A non-inferiority trial of prolonged exposure for posttraumatic stress disorder: In person versus home-based telehealth."** *Behaviour Research and Therapy* 89: 57-65.  
<http://www.sciencedirect.com/science/article/pii/S0005796716301966>

This is the first randomized controlled trial to evaluate non-inferiority of Prolonged Exposure (PE) delivered via home-based telehealth (HBT) compared to standard in-person (IP) PE. One-hundred thirty two Veterans recruited from a Southeastern Veterans Affairs Medical Center and affiliated University who met criteria for posttraumatic stress disorder (PTSD) were randomized to receive PE via HBT or PE via IP. Results indicated that PE-HBT was non-inferior to PE-IP in terms of reducing PTSD scores at post-treatment, 3 and 6 month follow-up. However, non-inferiority hypotheses for depression were only supported at 6 month follow-up. HBT has great potential to reduce patient burden associated with receiving treatment in terms of travel time, travel cost, lost work, and stigma without sacrificing efficacy. These findings indicate that telehealth treatment delivered directly into patients' homes may dramatically increase the reach of this evidence-based therapy for PTSD without diminishing effectiveness.

Agras, W. S., E. E. Fitzsimmons-Craft, et al. (2017). **"Evolution of cognitive-behavioral therapy for eating disorders."** *Behaviour Research and Therapy* 88: 26-36. <http://www.sciencedirect.com/science/article/pii/S0005796716301619>

(Available in free full text) The evolution of cognitive-behavioral therapy (CBT) for the treatment of bulimic disorders is described in this review. The impacts of successive attempts to enhance CBT such as the addition of exposure and response prevention; the development of enhanced CBT; and broadening the treatment from bulimia nervosa to binge eating disorder are considered. In addition to developing advanced forms of CBT, shortening treatment to guided self-help was the first step in broadening access to treatment. The use of technology such as computer-based therapy and more recently the Internet, promises further broadening of access to self-help and to therapist guided treatment. Controlled studies in this area are reviewed, and the balance of risks and benefits that accompany the use of technology and lessened therapist input are considered. Looking into the future, more sophisticated forms of treatment delivered as mobile applications ("apps") may lead to more personalized and efficacious treatments for bulimic disorders, thus enhancing the delivery of treatments for eating disorders.

Asarnow, J. and D. Ougrin (2017). **"From efficacy to pragmatic trials: Does the dodo bird verdict apply?"** *The Lancet Psychiatry* 4(2): 84-85. [http://dx.doi.org/10.1016/S2215-0366\(16\)30404-7](http://dx.doi.org/10.1016/S2215-0366(16)30404-7)

(Available in free full text) "Everybody has won, so all shall have prizes", concluded the dodo bird in Alice in Wonderland upon judging a race. Despite advances in treatment and the science upon which our treatments are built, the question of whether the dodo bird verdict continues to apply to our psychotherapy evidence<sup>1</sup> is emphasised by results of Ian Goodyer and colleagues' IMPACT trial in *The Lancet Psychiatry*. This pragmatic randomised controlled superiority trial compares three treatments in adolescents with unipolar major depressive disorder as delivered across diverse specialist mental health clinics in the UK health system: cognitive behavioural therapy (CBT), short-term psychoanalytical psychotherapy, and brief psychological intervention—the comparator treatment. Results indicate improvements over time for all three treatment conditions. However, the primary outcome of self-reported depressive symptoms, measured with the Mood and Feelings Questionnaire, did not differ significantly between groups at 36, 52, or 86 weeks post-randomisation, nor did the two hypothesised effective treatments (CBT and short-term psychoanalytical psychotherapy) lead to significantly greater benefits compared with the brief psychological intervention. Total costs of the trial interventions did not differ significantly between groups. These results give the field a well needed jolt. Research advances have sparked efforts to move from bench to bedside and implement evidence-based treatments to improve patient outcomes. The long delays between scientific discoveries and translation into clinical practice have been tackled through various mechanisms, including systematic reviews, evidence-based treatment registries, and policies that encourage or incentivise evidence-based treatments. Yet results of this pragmatic trial point to similar effectiveness of three different treatment strategies varying in levels of supporting evidence ... The IMPACT trial advances our knowledge and highlights directions for future research. If many of our treatments are "winners," then a key task is to identify the elements that contribute to this common effectiveness. In our enthusiasm for translation of science to clinical practice, we might have overemphasised evidence-based treatments and not attended sufficiently to treatment processes that lead to efficacy of diverse treatments, such as the therapeutic alliance or monitoring of patient outcomes or using tools such as clinical dashboards to guide evidence-based decision making. Identification of treatments and treatment elements with minimal adverse effects is also important, and many adolescents continue to report depressive symptoms despite diagnostic remission in IMPACT and other trials. Consistent with personalised medicine, tailoring of treatments for individual young people might be crucial to achievement of optimal benefits. Genetic, hormonal, brain-imaging, stress, and other forthcoming data from the IMPACT trial will enable analyses exploring variation and mechanisms of treatment response, enhancing knowledge for personalised approaches and the innovative contributions of this study. Finally, more research aimed at understanding key elements and mechanisms contributing to treatment effectiveness are needed in both controlled and pragmatic trials before a firm conclusion regarding the dodo bird verdict is applied.

Berger, T., A. Urech, et al. (2017). **"Effects of a transdiagnostic unguided internet intervention ('velibra') for anxiety disorders in primary care: Results of a randomized controlled trial."** *Psychological Medicine* 47(1): 67-80.  
<https://www.cambridge.org/core/article/div-class-title-effects-of-a-transdiagnostic-unguided-internet-intervention-velibra-for-anxiety-disorders-in-primary-care-results-of-a-randomized-controlled-trial-div/88E13C63F3C601D46A62C88E11EAB9F7>

Background Internet-based cognitive-behavioural treatment (ICBT) for anxiety disorders has shown some promise, but no study has yet examined unguided ICBT in primary care. This randomized controlled trial (RCT) investigated whether a

transdiagnostic, unguided ICBT programme for anxiety disorders is effective in primary care settings, after a face-to-face consultation with a physician (MD). We hypothesized that care as usual (CAU) plus unguided ICBT would be superior to CAU in reducing anxiety and related symptoms among patients with social anxiety disorder (SAD), panic disorder with or without agoraphobia (PDA) and/or generalized anxiety disorder (GAD). Method Adults (n = 139) with at least one of these anxiety disorders, as reported by their MD and confirmed by a structured diagnostic interview, were randomized. Unguided ICBT was provided by a novel transdiagnostic ICBT programme ('velibra'). Primary outcomes were generic measures, such as anxiety and depression symptom severity, and diagnostic status at post-treatment (9 weeks). Secondary outcomes included anxiety disorder-specific measures, quality of life, treatment adherence, satisfaction, and general psychiatric symptomatology at follow-up (6 months after randomization). Results CAU plus unguided ICBT was more effective than CAU at post-treatment, with small to medium between-group effect sizes on primary (Cohen's d = 0.41–0.47) and secondary (Cohen's d = 0.16–0.61) outcomes. Treatment gains were maintained at follow-up. In the treatment group, 28.2% of those with a SAD diagnosis, 38.3% with a PDA diagnosis, and 44.8% with a GAD diagnosis at pretreatment no longer fulfilled diagnostic criteria at post-treatment. Conclusions The unguided ICBT intervention examined is effective for anxiety disorders when delivered in primary care.

Brabyn, S., R. Araya, et al. (2016). **"The second randomised evaluation of the effectiveness, cost-effectiveness and acceptability of computerised therapy (react-2) trial: Does the provision of telephone support enhance the effectiveness of computer-delivered cognitive behaviour therapy? A randomised controlled trial."** *Health Technol Assess* 20(89): 1-64. <https://www.ncbi.nlm.nih.gov/pubmed/27922448>

**BACKGROUND:** Computerised cognitive behaviour therapy (cCBT) is an efficient form of therapy potentially improving access to psychological care. Indirect evidence suggests that the uptake and effectiveness of cCBT can be increased if facilitated by telephone, but this is not routinely offered in the NHS. **OBJECTIVES:** To compare the clinical effectiveness and cost-effectiveness of telephone-facilitated free-to-use cCBT [e.g. MoodGYM (National Institute for Mental Health Research, Australian National University, Canberra, ACT, Australia)] with minimally supported cCBT. **DESIGN:** This study was a multisite, pragmatic, open, two-arm, parallel-group randomised controlled trial with a concurrent economic evaluation. **SETTING:** Participants were recruited from GP practices in Bristol, Manchester, Sheffield, Hull and the north-east of England. **PARTICIPANTS:** Potential participants were eligible to participate in the trial if they were adults with depression scoring  $\geq 10$  on the Patient Health Questionnaire-9 (PHQ-9). **INTERVENTIONS:** Participants were randomised using a computer-generated random number sequence to receive minimally supported cCBT or telephone-facilitated cCBT. Participants continued with usual general practitioner care. **MAIN OUTCOME MEASURES:** The primary outcome was self-reported symptoms of depression, as assessed by the PHQ-9 at 4 months post randomisation. **SECONDARY OUTCOMES:** Secondary outcomes were depression at 12 months and anxiety, somatoform complaints, health utility (as assessed by the European Quality of Life-5 Dimensions questionnaire) and resource use at 4 and 12 months. **RESULTS:** Clinical effectiveness: 182 participants were randomised to minimally supported cCBT and 187 participants to telephone-facilitated cCBT. There was a difference in the severity of depression at 4 and 12 months, with lower levels in the telephone-facilitated group. The odds of no longer being depressed (defined as a PHQ-9 score of  $< 10$ ) at 4 months were twice as high in the telephone-facilitated cCBT group [odds ratio (OR) 2.05, 95% confidence interval (CI) 1.23 to 3.42]. The benefit of telephone-facilitated cCBT was no longer significant at 12 months (OR 1.63, 95% CI 0.98 to 2.71). At 4 months the between-group difference in PHQ-9 scores was 1.9 (95% CI 0.5 to 3.3). At 12 months the results still favoured telephone-facilitated cCBT but were no longer statistically significant, with a difference in PHQ-9 score of 0.9 (95% CI -0.5 to 2.3). When considering the whole follow-up period, telephone-facilitated cCBT was associated with significantly lower PHQ-9 scores than minimally supported cCBT (mean difference -1.41, 95% CI -2.63 to -0.17;  $p = 0.025$ ). There was a significant improvement in anxiety scores over the trial period (between-group difference 1.1, 95% CI 0.1 to 2.3;  $p = 0.037$ ). In the case of somatic complaints (assessed using the Patient Health Questionnaire-15), there was a borderline statistically significant difference over the trial period (between-group difference 1.1, 95% CI 0.0 to 1.8;  $p = 0.051$ ). There were gains in quality-adjusted life-years at reduced cost when telephone facilitation was added to MoodGYM. However, the results were subject to uncertainty. **CONCLUSIONS:** The results showed short-term benefits from the addition of telephone facilitation to cCBT. The effect was small to moderate and comparable with that of other primary care psychological interventions. Telephone facilitation should be considered when offering cCBT for depression. **LIMITATIONS:** Participants' depression was assessed with the PHQ-9, cCBT use was quite low and there was a slightly greater than anticipated loss to follow-up. **FUTURE RESEARCH RECOMMENDATIONS:** Improve the acceptability of cCBT and its capacity to address coexisting disorders. Large-scale pragmatic trials of cCBT with bibliotherapy and telephone-based interventions are required.

Cristea, I. A., C. Gentili, et al. (2017). **"Sponsorship bias in the comparative efficacy of psychotherapy and pharmacotherapy for adult depression: Meta-analysis."** *The British Journal of Psychiatry* 210(1): 16-23

**Background** Sponsorship bias has never been investigated for non-pharmacological treatments like psychotherapy. **Aims** We examined industry funding and author financial conflict of interest (COI) in randomised controlled trials directly comparing psychotherapy and pharmacotherapy in depression. **Method** We conducted a meta-analysis with subgroup comparisons for industry v. non-industry-funded trials, and respectively for trial reports with author financial COI v. those without. **Results** In total, 45 studies were included. In most analyses, pharmacotherapy consistently showed significant effectiveness over psychotherapy,  $g = -0.11$  (95% CI -0.21 to -0.02) in industry-funded trials. Differences between industry and non-industry-funded trials were significant, a result only partly confirmed in sensitivity analyses. We identified five instances where authors of the original article had not reported financial COI. **Conclusions** Industry-funded trials for depression appear to subtly favour pharmacotherapy over psychotherapy. Disclosure of all financial ties with the pharmaceutical industry should be encouraged.

Debrot, A., N. Meuwly, et al. (2017). **"More than just sex: Affection mediates the association between sexual activity and well-being."** *Personality and Social Psychology Bulletin* 43(3): 287-299. <http://journals.sagepub.com/doi/abs/10.1177/0146167216684124>

Positive interpersonal interactions such as affection are central to well-being. Sex is associated with greater individual well-being, but little is known about why this occurs. We predicted that experienced affection would account for the association between sex and well-being. Cross-sectional results indicated that affection mediated the association between sex and both life satisfaction (Study 1) and positive emotions (however, among men only in Study 2). In Study 3, an experience sampling study with 106 dual-earner couples with children, affection mediated the association between sex and increased positive affect in daily life. Cross-lagged analyses in Study 3 to 4 supported the predicted direction of the associations. Moreover, the strength of the daily association between sex and positive affect predicted both partners' relationship satisfaction 6 months later. Our findings underscore the importance of affection and positive affect for understanding how sex promotes well-being and has long-term relational benefits. *The paper starts by quoting Anaïs Nin - "Only the united beat of sex and heart together can create ecstasy" and goes on in its introductory section to say:* "Decades of research indicate that social relationships are a basic human need (Baumeister & Leary, 1995), as they are crucial for health and well-being (e.g., Holt-Lunstad, Smith, Layton, & Brayne, 2010). Most studies linking close relationships to well-being have focused on social support, while neglecting the importance of

nonverbal interactions, such as sex or touch (Gallace & Spence, 2010; Impett, Muise, & Peragine, 2014). Sexual activity in romantic relationships is a nonverbal interaction often experienced as highly intimate (e.g., Muise & Impett, 2016). Moreover, the literature suggests a robust positive association between sexual frequency and well-being (e.g., Blanchflower & Oswald, 2004; Muise, Schimmack, & Impett, 2016). However, little is known about what accounts for this association. Sexuality research has tended to neglect relational aspects of sexuality (Impett et al., 2014). As illustrated by Anaïs Nin's quote, sex should be the most rewarding when coupled with an affectionate connection to the partner. This article aims to merge research on sexuality with research on close relationships (Diamond, 2013) to test the hypothesis that sexual activity is associated with affectionate experiences with the partner, in turn promoting positive emotions and well-being. Sexuality and Well-Being The link between having an active and satisfying sexual life and individual well-being has received strong support. In a large nationally representative U.S. sample, sexual frequency was associated with greater general happiness (Blanchflower & Oswald, 2004). In a large international study, sexual frequency and sexual satisfaction were associated with greater life happiness in older adults (Laumann et al., 2006). In addition, Muise, Schimmack, et al. (2016) underscore the relevance of these basic findings: the size of the difference in well-being for people having sex once a week, compared with those having sex less than once a month, was greater than the size of the difference in well-being for those making US\$75,000 compared with US\$25,000 a year—a US\$50,000 difference." [See too the excellent BPS Digest discussion of this article at <https://digest.bps.org.uk/2017/02/27/its-all-the-cuddling-psychologists-explore-why-people-who-have-more-sex-are-happier/>].

Fairburn, C. G. and V. Patel (2017). **"The impact of digital technology on psychological treatments and their dissemination."** *Behaviour Research and Therapy* 88: 19-25. <http://www.sciencedirect.com/science/article/pii/S0005796716301371>

(Available in free full text) The psychological treatment of mental health problems is beginning to undergo a sea-change driven by the widespread availability of digital technology. In this paper we provide an overview of the developments to date and those in the pipeline. We describe the various uses of digital interventions and consider their likely impact on clinical practice, clinical services and the global dissemination of psychological treatments. We note the importance of online clinics, blended treatment, digital assessment and digital training.

Gariépy, G., H. Honkaniemi, et al. (2016). **"Social support and protection from depression: Systematic review of current findings in western countries."** *The British Journal of Psychiatry* 209(4): 284-293. <http://bjp.rcpsych.org/content/209/4/284>

Background Numerous studies report an association between social support and protection from depression, but no systematic review or meta-analysis exists on this topic. Aims To review systematically the characteristics of social support (types and source) associated with protection from depression across life periods (childhood and adolescence; adulthood; older age) and by study design (cross-sectional v. cohort studies). Method A systematic literature search conducted in February 2015 yielded 100 eligible studies. Study quality was assessed using a critical appraisal checklist, followed by meta-analyses. Results Sources of support varied across life periods, with parental support being most important among children and adolescents, whereas adults and older adults relied more on spouses, followed by family and then friends. Significant heterogeneity in social support measurement was noted. Effects were weaker in both magnitude and significance in cohort studies. Conclusions Knowledge gaps remain due to social support measurement heterogeneity and to evidence of reverse causality bias.

Goodyer, I. M., S. Reynolds, et al. (2017). **"Cognitive behavioural therapy and short-term psychoanalytical psychotherapy versus a brief psychosocial intervention in adolescents with unipolar major depressive disorder (impact): A multicentre, pragmatic, observer-blind, randomised controlled superiority trial."** *The Lancet Psychiatry* 4(2): 109-119. [http://dx.doi.org/10.1016/S2215-0366\(16\)30378-9](http://dx.doi.org/10.1016/S2215-0366(16)30378-9)

(Available in free full text) Background Psychological treatments for adolescents with unipolar major depressive disorder are associated with diagnostic remission within 28 weeks in 65–70% of patients. We aimed to assess the medium-term effects and costs of psychological therapies on maintenance of reduced depression symptoms 12 months after treatment. Methods We did this multicentre, pragmatic, observer-blind, randomised controlled superiority trial (IMPACT) at 15 National Health Service child and adolescent mental health service (CAMHS) clinics in three regions in England. Adolescent patients (aged 11–17 years) with a diagnosis of DSM IV major depressive disorder were randomly assigned (1:1:1), via a web-based randomisation service, to receive cognitive behavioural therapy (CBT) or short-term psychoanalytical therapy versus a reference brief psychosocial intervention. Randomisation was stochastically minimised by age, sex, self-reported depression sum score, and region. Patients and clinicians were aware of group allocation, but allocation was concealed from outcome assessors. Patients were followed up and reassessed at weeks 6, 12, 36, 52, and 86 post-randomisation. The primary outcome was self-reported depression symptoms at weeks 36, 52, and 86, as measured with the self-reported Mood and Feelings Questionnaire (MFQ). Because our aim was to compare the two psychological therapies with the brief psychosocial intervention, we first established whether CBT was inferior to short-term psychoanalytical psychotherapy for the same outcome. Primary analysis was by intention to treat. This trial is registered with Current Controlled Trials, number ISRCTN83033550. Findings Between June 29, 2010, and Jan 17, 2013, we randomly assigned 470 patients to receive the brief psychosocial intervention (n=158), CBT (n=155), or short-term psychoanalytical therapy (n=157); 465 patients comprised the intention-to-treat population. 392 (84%) patients had available data for primary analysis by the end of follow-up. Treatment fidelity and differentiation were established between the three interventions. The median number of treatment sessions differed significantly between patients in the brief psychosocial intervention group (n=6 [IQR 4–11]), CBT group (n=9 [5–14]), and short-term psychoanalytical therapy group (n=11 [5–23]; p<0.0001), but there was no difference between groups in the average duration of treatment (27.5 [SD 21.5], 24.9 [17.7], 27.9 [16.8] weeks, respectively; Kruskal–Wallis p=0.238). Self-reported depression symptoms did not differ significantly between patients given CBT and those given short-term psychoanalytical therapy at weeks 36 (treatment effect 0.179, 95% CI –3.731 to 4.088; p=0.929), 52 (0.307, –3.161 to 3.774; p=0.862), or 86 (0.578, –2.948 to 4.104; p=0.748). These two psychological treatments had no superiority effect compared with brief psychosocial intervention at weeks 36 (treatment effect –3.234, 95% CI –6.611 to 0.143; p=0.061), 52 (–2.806, –5.790 to 0.177; p=0.065), or 86 (–1.898, –4.922 to 1.126; p=0.219). Physical adverse events (self-reported breathing problems, sleep disturbances, drowsiness or tiredness, nausea, sweating, and being restless or overactive) did not differ between the groups. Total costs of the trial interventions did not differ significantly between treatment groups. Interpretation We found no evidence for the superiority of CBT or short-term psychoanalytical therapy compared with a brief psychosocial intervention in maintenance of reduced depression symptoms 12 months after treatment. Short-term psychoanalytical therapy was as effective as CBT and, together with brief psychosocial intervention, offers additional patient choice for psychological therapy, alongside CBT, for adolescents with moderate to severe depression who are attending routine specialist CAMHS clinics.

Hallgren, M., B. Helgadóttir, et al. (2016). **"Exercise and internet-based cognitive-behavioural therapy for depression: Multicentre randomised controlled trial with 12-month follow-up."** *The British Journal of Psychiatry* 209(5): 414-420

Background Evidence-based treatment of depression continues to grow, but successful treatment and maintenance of treatment response remains limited. Aims To compare the effectiveness of exercise, internet-based cognitive-behavioural therapy (ICBT) and usual care for depression. Method A multicentre, three-group parallel, randomised controlled trial was conducted with assessment at 3 months (post-treatment) and 12 months (primary end-point). Outcome assessors were masked to group allocation. Computer-generated allocation was performed externally in blocks of 36 and the ratio of participants per group was 1:1:1. In total, 945 adults with mild to moderate depression aged 18–71 years were recruited from primary healthcare centres located throughout Sweden. Participants were randomly assigned to one of three 12-week interventions: supervised group exercise, clinician-supported ICBT or usual care by a physician. The primary outcome was depression severity assessed by the Montgomery-Åsberg Depression Rating Scale (MADRS). Results The response rate at 12-month follow-up was 84%. Depression severity reduced significantly in all three treatment groups in a quadratic trend over time. Mean differences in MADRS score at 12 months were 12.1 (ICBT), 11.4 (exercise) and 9.7 (usual care). At the primary end-point the group × time interaction was significant for both exercise and ICBT. Effect sizes for both interventions were small to moderate. Conclusions The long-term treatment effects reported here suggest that prescribed exercise and clinician-supported ICBT should be considered for the treatment of mild to moderate depression in adults.

Hearing, C. M., W. C. Chang, et al. (2016). **"Physical exercise for treatment of mood disorders: A critical review."** *Curr Behav Neurosci Rep* 3: 350-359. <http://paperity.org/p/78253682/physical-exercise-for-treatment-of-mood-disorders-a-critical-review>

(Available in free full text) The purpose of this review is to critically assess the evidence for exercise as an adjunct intervention for major depressive disorder and bipolar disorder, chronic conditions characterized by frequent comorbid conditions as well as interepisodic symptoms with poor quality of life and impaired functioning. Individuals with these mood disorders are at higher risk of cardiovascular disease and premature death in part because of increased rates of obesity, inactivity, and diabetes mellitus compared to the general population. Exercise may not only mitigate the increased risk of cardiovascular disease, but could also potentially improve the long term outcomes of mood disorders. Recent findings We conducted a literature review on the impact of exercise on mood disorders and associated comorbid conditions as well as possible biological mechanisms. We found that exercise impacts both the physical health parameters of mood disorders as well as mental health outcomes. Exercise also positively impacts conditions frequently comorbid with mood disorders (i.e. anxiety, pain, and insomnia). There are multiple candidate biomarkers for exercise, with brain-derived neurotrophic factor and oxidative stress as two main promising components of exercise's anti-depressant effect. Summary Exercise appears to be a promising adjunct treatment for mood disorders. We conclude with recommendations for future research of exercise as an adjunct intervention for mood disorders.

Hedman, E., E. Axelsson, et al. (2016). **"Exposure-based cognitive-behavioural therapy via the internet and as bibliotherapy for somatic symptom disorder and illness anxiety disorder: Randomised controlled trial."** *The British Journal of Psychiatry* 209(5): 407-413

Background In DSM-5 two new diagnoses, somatic symptom disorder (SSD) and illness anxiety disorder (IAD), have replaced DSM-IV hypochondriasis. There are no previous treatment studies for these disorders. Cognitive-behavioural therapy (CBT) delivered as therapist-guided or unguided internet treatment or as unguided bibliotherapy could be used to increase treatment accessibility. Aims To investigate the effect of CBT delivered as guided internet treatment (ICBT), unguided internet treatment (U-ICBT) and as unguided bibliotherapy. Method A randomised controlled trial (RCT) where participants (n = 132) with a diagnosis of SSD or IAD were randomised to ICBT, U-ICBT, bibliotherapy or to a control condition on a waiting list (trial registration: Clinicaltrials.gov identifier NCT01966705). Results Compared with the control condition, all three treatment groups made large and significant improvements on the primary outcome Health Anxiety Inventory (between-group d at post-treatment was 0.80–1.27). Conclusions ICBT, U-ICBT and bibliotherapy can be highly effective in the treatment of SSD and IAD. This is the first study showing that these new DSM-5 disorders can be effectively treated.

Jacka, F. N., A. O'Neil, et al. (2017). **"A randomised controlled trial of dietary improvement for adults with major depression (the 'SMILES' trial)."** *BMC Medicine* 15(1): 23. <http://dx.doi.org/10.1186/s12916-017-0791-y>

(Available in free full text) Background The possible therapeutic impact of dietary changes on existing mental illness is largely unknown. Using a randomised controlled trial design, we aimed to investigate the efficacy of a dietary improvement program for the treatment of major depressive episodes. Methods 'SMILES' was a 12-week, parallel-group, single blind, randomised controlled trial of an adjunctive dietary intervention in the treatment of moderate to severe depression. The intervention consisted of seven individual nutritional consulting sessions delivered by a clinical dietician. The control condition comprised a social support protocol to the same visit schedule and length. Depression symptomatology was the primary endpoint, assessed using the Montgomery-Åsberg Depression Rating Scale (MADRS) at 12 weeks. Secondary outcomes included remission and change of symptoms, mood and anxiety. Analyses utilised a likelihood-based mixed-effects model repeated measures (MMRM) approach. The robustness of estimates was investigated through sensitivity analyses. Results We assessed 166 individuals for eligibility, of whom 67 were enrolled (diet intervention, n = 33; control, n = 34). Of these, 55 were utilising some form of therapy: 21 were using psychotherapy and pharmacotherapy combined; 9 were using exclusively psychotherapy; and 25 were using only pharmacotherapy. There were 31 in the diet support group and 25 in the social support control group who had complete data at 12 weeks. The dietary support group demonstrated significantly greater improvement between baseline and 12 weeks on the MADRS than the social support control group,  $t(60.7) = 4.38$ ,  $p < 0.001$ , Cohen's  $d = -1.16$ . Remission, defined as a MADRS score  $< 10$ , was achieved for 32.3% (n = 10) and 8.0% (n = 2) of the intervention and control groups, respectively ( $\chi^2(1) = 4.84$ ,  $p = 0.028$ ); number needed to treat (NNT) based on remission scores was 4.1 (95% CI of NNT 2.3–27.8). A sensitivity analysis, testing departures from the missing at random (MAR) assumption for dropouts, indicated that the impact of the intervention was robust to violations of MAR assumptions. Conclusions These results indicate that dietary improvement may provide an efficacious and accessible treatment strategy for the management of this highly prevalent mental disorder, the benefits of which could extend to the management of common co-morbidities.

Kamenov, K., C. Twomey, et al. (2017). **"The efficacy of psychotherapy, pharmacotherapy and their combination on functioning and quality of life in depression: A meta-analysis."** *Psychological Medicine* 47(3): 414-425. <https://www.cambridge.org/core/article/div-class-title-efficacy-of-psychotherapy-pharmacotherapy-and-their-combination-on-functioning-and-quality-of-life-in-depression-a-meta-analysis-div/8A1686CD0D1490E6BAACB2045AE51AAF>

(Available in free full text) Background There is growing recognition of the importance of both functioning and quality of life (QoL) outcomes in the treatment of depressive disorders, but the meta-analytic evidence is scarce. The objective of this meta-analysis of randomized controlled trials (RCTs) was to determine the absolute and relative effects of psychotherapy, pharmacotherapy and their combination on functioning and QoL in patients with depression. Method One hundred and fifty-three outcome trials involving 29 879 participants with depressive disorders were identified through database searches in

Pubmed, PsycINFO and the Cochrane Central Register of Controlled Trials. Results Compared to control conditions, psychotherapy and pharmacotherapy yielded small to moderate effect sizes for functioning and QoL, ranging from  $g = 0.31$  to  $g = 0.43$ . When compared directly, initial analysis yielded no evidence that one of them was superior. After adjusting for publication bias, psychotherapy was more efficacious than pharmacotherapy ( $g = 0.21$ ) for QoL. The combination of psychotherapy and medication performed significantly better for both outcomes compared to each treatment alone yielding small effect sizes ( $g = 0.32$  to  $g = 0.39$ ). Both interventions improved depression symptom severity more than functioning and QoL. Conclusion Despite the small number of comparative trials for some of the analyses, this study reveals that combined treatment is superior, but psychotherapy and pharmacotherapy alone are also efficacious for improving functioning and QoL. The overall relatively modest effects suggest that future tailoring of therapies could be warranted to better meet the needs of individuals with functioning and QoL problems.

Karakurt, G., K. Whiting, et al. (2016). **"Couples therapy for intimate partner violence: A systematic review and meta-analysis."** *Journal of Marital and Family Therapy* 42(4): 567-583. <http://dx.doi.org/10.1111/jmft.12178>

Intimate partner violence is a serious public health problem accompanied by substantial morbidity and mortality. Despite its documented impact on health, there is no widely recognized treatment of choice. Some studies indicate that couples suffering from situational violence may benefit from couples therapy, but professionals are cautious to risk the possibility of violent retaliation between partners. After a comprehensive literature search of 1,733 citations, this systematic review and meta-analysis compiles the results of six studies to investigate the effectiveness of couples therapy as a treatment for violence. Preliminary data suggest that couples therapy is a viable treatment in select situations.

Karukivi, M., T. Vahlberg, et al. (2017). **"Clinical importance of personality difficulties: Diagnostically sub-threshold personality disorders."** *BMC Psychiatry* 17(1): 16. <http://dx.doi.org/10.1186/s12888-017-1200-y>

(Available in free full text) Background Current categorical classification of personality disorders has been criticized for overlooking the dimensional nature of personality and that it may miss some sub-threshold personality disturbances of clinical significance. We aimed to evaluate the clinical importance of these conditions. For this, we used a simple four-level dimensional categorization based on the severity of personality disturbance. Methods The sample consisted of 352 patients admitted to mental health services. All underwent diagnostic assessments (SCID-I and SCID-II) and filled in questionnaires concerning their social situation and childhood adversities, and other validated tools, including the Beck Depression Inventory (BDI), Alcohol Use Disorders Identification Test (AUDIT), health-related quality of life (15D), and the five-item Mental Health Index (MHI-5). The patients were categorized into four groups according to the level of personality disturbance: 0 = No personality disturbance, 1 = Personality difficulty (one criterion less than threshold for one or more personality disorders), 2 = Simple personality disorder (one personality disorder), and 3 = Complex/Severe personality disorder (two or more personality disorders or any borderline and antisocial personality disorder). Results The proportions of the groups were as follows: no personality disturbance 38.4% ( $n = 135$ ), personality difficulty 14.5% ( $n = 51$ ), simple personality disorder 19.9% ( $n = 70$ ), and complex/severe personality disorder 24.4% ( $n = 86$ ). Patients with no personality disturbance were significantly differentiated ( $p < 0.05$ ) from the other groups regarding the BDI, 15D, and MHI-5 scores as well as the number of Axis I diagnoses. Patients with complex/severe personality disorders stood out as being worst off. Social dysfunction was related to the severity of the personality disturbance. Patients with a personality difficulty or a simple personality disorder had prominent symptoms and difficulties, but the differences between these groups were mostly non-significant. Conclusions An elevated severity level of personality disturbance is associated with an increase in psychiatric morbidity and social dysfunction. Diagnostically sub-threshold personality difficulties are of clinical significance and the degree of impairment corresponds to actual personality disorders. Since these two groups did not significantly differ from each other, our findings also highlight the complexity related to the use of diagnostic thresholds for separate personality disorders.

Koole, S. L. and W. Tschacher (2016). **"Synchrony in psychotherapy: A review and an integrative framework for the therapeutic alliance."** *Frontiers in Psychology* 7(862). <http://journal.frontiersin.org/article/10.3389/fpsyg.2016.00862>

(Free full text) During psychotherapy, patient and therapist tend to spontaneously synchronize their vocal pitch, bodily movements, and even their physiological processes. In the present article, we consider how this pervasive phenomenon may shed new light on the therapeutic relationship- or alliance- and its role within psychotherapy. We first review clinical research on the alliance and the multidisciplinary area of interpersonal synchrony. We then integrate both literatures in the Interpersonal Synchrony (In-Sync) model of psychotherapy. According to the model, the alliance is grounded in the coupling of patient and therapist's brains. Because brains do not interact directly, movement synchrony may help to establish inter-brain coupling. Inter-brain coupling may provide patient and therapist with access to another's internal states, which facilitates common understanding and emotional sharing. Over time, these interpersonal exchanges may improve patients' emotion-regulatory capacities and related therapeutic outcomes. We discuss the empirical assessment of interpersonal synchrony and review preliminary research on synchrony in psychotherapy. Finally, we summarize our main conclusions and consider the broader implications of viewing psychotherapy as the product of two interacting brains.

Malhi, G. S. and Y. Byrow (2016). **"Exercising control over bipolar disorder."** *Evidence Based Mental Health* 19(4): 103-105. <http://ebmh.bmj.com/content/19/4/103.short>

(Available in free full text) Following extensive research exercise has emerged as an effective treatment for major depressive disorder, and it is now a recognised therapy alongside other interventions. In contrast, there is a paucity of research examining the therapeutic effects of exercise for those with bipolar disorder. Given that dysfunctional reward processing is central to bipolar disorder, research suggests that exercise can perhaps be framed as a reward-related event that may have the potential to precipitate a manic episode. The behavioural activation system (BAS) is a neurobehavioural system that is associated with responding to reward and provides an appropriate framework to theoretically examine and better understand the effects of exercise treatment on bipolar disorder. This article discusses recent research findings and provides an overview of the extant literature related to the neurobiological underpinnings of BAS and exercise as they relate to bipolar disorder. This is important clinically because depending on mood state in bipolar disorder, we postulate that exercise could be either beneficial or deleterious with positive or negative effects on the illness. Clearly, this complicates the evaluation of exercise as a potential treatment in terms of identifying its optimal characteristics in this population.

Manes, S., S. Nodop, et al. (2016). **"Social anxiety as a potential mediator of the association between attachment and depression."** *Journal of Affective Disorders* 205: 264-268. [//www.sciencedirect.com/science/article/pii/S0165032716303019](http://www.sciencedirect.com/science/article/pii/S0165032716303019)

Objective The study represents a conceptual replication of the study by Eng et al. (2001) in a sample of adult patients diagnosed with social anxiety disorder as primary diagnosis. Methods Two different attachment questionnaires (Bielefeld Questionnaire of Client Expectations (BQCE) and Experiences in Close Relationships (ECR-RD)) were applied to examine whether the effect of attachment on depression (measured by the BDI) is mediated by social anxiety (measured by the LSAS) in a cross-

sectional study. Results The data confirms such a mediation. The effect of attachment measured with the BQCE on depression was completely mediated, whereas the effect of both scales of the ECR-RD (attachment related avoidance and anxiety) on depression was only partially mediated by social anxiety disorder. Conclusion The study supports the association of attachment, social anxiety, and depressive symptoms and the need to consider different perspectives on attachment.

Mojtabai, R., M. Olfson, et al. (2016). **"National trends in the prevalence and treatment of depression in adolescents and young adults."** *Pediatrics*

(Available in free full text) OBJECTIVES: This study examined national trends in 12-month prevalence of major depressive episodes (MDEs) in adolescents and young adults overall and in different sociodemographic groups, as well as trends in depression treatment between 2005 and 2014. METHODS: Data were drawn from the National Surveys on Drug Use and Health for 2005 to 2014, which are annual cross-sectional surveys of the US general population. Participants included 172 495 adolescents aged 12 to 17 and 178 755 adults aged 18 to 25. Time trends in 12-month prevalence of MDEs were examined overall and in different subgroups, as were time trends in the use of treatment services. RESULTS: The 12-month prevalence of MDEs increased from 8.7% in 2005 to 11.3% in 2014 in adolescents and from 8.8% to 9.6% in young adults (both  $P < .001$ ). The increase was larger and statistically significant only in the age range of 12 to 20 years. The trends remained significant after adjustment for substance use disorders and sociodemographic factors. Mental health care contacts overall did not change over time; however, the use of specialty mental health providers increased in adolescents and young adults, and the use of prescription medications and inpatient hospitalizations increased in adolescents. CONCLUSIONS: The prevalence of depression in adolescents and young adults has increased in recent years. In the context of little change in mental health treatments, trends in prevalence translate into a growing number of young people with untreated depression. The findings call for renewed efforts to expand service capacity to best meet the mental health care needs of this age group.

Morgan, A. J., P. Chittleborough, et al. (2016). **"Self-help strategies for sub-threshold anxiety: A delphi consensus study to find messages suitable for population-wide promotion."** *Journal of Affective Disorders* 206: 68-76.

[//www.sciencedirect.com/science/article/pii/S0165032716303391](http://www.sciencedirect.com/science/article/pii/S0165032716303391)

(Available in free full text) Background Many self-help strategies have been recommended for anxiety, but it is not clear which strategies are most effective and could be encouraged as part of an early intervention approach. This study used the Delphi expert consensus method to identify which strategies for mild (sub-threshold) anxiety are thought to be helpful and feasible to implement for individuals without professional assistance. Methods Participants were an international sample of 51 clinicians/researchers and 32 consumer advocates with expertise in anxiety. The scientific and lay literature was systematically searched for strategies claimed to be effective for anxiety. Participants rated the likely helpfulness of each strategy in reducing sub-threshold anxiety (related to generalised anxiety, social anxiety, or non-specific anxiety symptoms) and the feasibility of implementation in an iterative process across three questionnaire rounds. Results 66 out of 324 candidate strategies were endorsed by at least 80% of both consumers and clinicians/researchers as likely to be helpful, and 18 were judged as feasible to carry out. Endorsed strategies were most frequently related to cognitive strategies and other psychological methods, interpersonal strategies, reducing physical tension, and lifestyle strategies. Few strategies were endorsed that were related to diet, supplements, or complementary medicine. Limitations Findings may not apply to other forms of mild anxiety related to panic attacks or specific phobias. Conclusions This study contributes to the evidence-base on strategies that individuals can use to improve mild anxiety symptoms. Research is now required to evaluate whether promoting the strategies can help reduce the overall community burden from anxiety disorders.

Murray, H., C. Merritt, et al. (2016). **"Clients' experiences of returning to the trauma site during ptsd treatment: An exploratory study."** *Behavioural and Cognitive Psychotherapy* 44(4): 420-430.

<https://www.cambridge.org/core/article/clients-experiences-of-returning-to-the-trauma-site-during-ptsd-treatment-an-exploratory-study/595047F093B98541D766E25CE9813F2C>

Background: Visits to the location of the trauma are often included in trauma-focused cognitive behavioural therapy (TF-CBT) for post-traumatic stress disorder (PTSD), but no research to date has explored how service users experience these visits, or whether and how they form an effective part of treatment. Aims: The study aimed to ascertain whether participants found site visits helpful, to test whether the functions of the site visit predicted by cognitive theories of PTSD were endorsed, and to create a grounded theory model of how site visits are experienced. Method: Feedback was collected from 25 participants who had revisited the scene of the trauma as part of TF-CBT for PTSD. The questionnaire included both free text items, for qualitative analysis, and forced-choice questions regarding hypothesized functions of the site visit. Results: Overall, participants found the site visits helpful, and endorsed the functions predicted by the cognitive model. A model derived from the feedback illustrated four main processes occurring during the site visit: "facing and overcoming fear"; "filling in the gaps"; "learning from experiences" and "different look and feel to the site", which, when conducted with "help and support", usually from the therapist, led to a sense of "closure and moving on". Conclusions: Therapist-accompanied site visits may have various useful therapeutic functions and participants experience them positively.

Neufeld, S. A. S., V. J. Dunn, et al. (2017). **"Reduction in adolescent depression after contact with mental health services: A longitudinal cohort study in the UK."** *The Lancet Psychiatry* 4(2): 120-127. [http://dx.doi.org/10.1016/S2215-0366\(17\)30002-0](http://dx.doi.org/10.1016/S2215-0366(17)30002-0)

(Available in free full text) Background Evidence regarding the association between service contact and subsequent mental health in adolescents is scarce, and previous findings are mixed. We aimed to longitudinally assess the extent to which depressive symptoms in adolescents change after contact with mental health services. Methods As part of a longitudinal cohort study, between April 28, 2005, and March 17, 2010, we recruited 1238 14-year-old adolescents and their primary caregivers from 18 secondary schools in Cambridgeshire, UK. Participants underwent follow-up assessment at months 18 and 36. Trained researchers assessed the adolescents for current mental disorder using the Schedule for Affective Disorders and Schizophrenia for School-Age Children Present and Lifetime version (K-SADS-PL). Caregivers and adolescents reported contact with mental health services in the year before baseline. Adolescents self-reported depressive symptoms (Mood and Feelings Questionnaire [MFQ]) at each timepoint. We assessed change in MFQ sum scores from baseline contact with mental health services using multilevel mixed-effects regression adjusted for sociodemographic, environmental, individual, and mental health confounders, with multiple imputation of missing data. We used propensity score weighting to balance confounders between treatment (users of mental health services) and control (non-users of mental health services) groups. We implemented an MFQ clinical cutoff following the results of receiver operating characteristic analysis. Findings 14-year-old adolescents who had contact with mental health services in the past year had a greater decrease in depressive symptoms than those without contact (adjusted coefficient  $-1.68$ , 95% CI  $-3.22$  to  $-0.14$ ;  $p=0.033$ ). By age 17 years, the odds of reporting clinical depression were more than seven times higher in individuals without contact than in service users who had been similarly depressed at baseline (adjusted odds ratio 7.38, 1.73–31.50;  $p=0.0069$ ). Interpretation Our findings show that contact with mental health services at age 14 years

by adolescents with a mental disorder reduced the likelihood of depression by age 17 years. This finding supports the improvement of access to adolescent mental health services.

Palmier-Claus, J. E., K. Berry, et al. (2016). **"Relationship between childhood adversity and bipolar affective disorder: Systematic review and meta-analysis."** *The British Journal of Psychiatry* 209(6): 454-459. <http://bjp.rcpsych.org/content/209/6/454>

Background The relationship between childhood adversity and bipolar affective disorder remains unclear. Aims To understand the size and significance of this effect through a statistical synthesis of reported research. Method Search terms relating to childhood adversity and bipolar disorder were entered into Medline, EMBASE, PsycINFO and Web of Science. Eligible studies included a sample diagnosed with bipolar disorder, a comparison sample and a quantitative measure of childhood adversity. Results In 19 eligible studies childhood adversity was 2.63 times (95% CI 2.00–3.47) more likely to have occurred in bipolar disorder compared with non-clinical controls. The effect of emotional abuse was particularly robust (OR = 4.04, 95% CI 3.12–5.22), but rates of adversity were similar to those in psychiatric controls. Conclusions Childhood adversity is associated with bipolar disorder, which has implications for the treatment of this clinical group. Further prospective research could clarify temporal causality and explanatory mechanisms.

Priebe, S., G. Ramjaun, et al. (2017). **"Do patients prefer optimistic or cautious psychiatrists? An experimental study with new and long-term patients."** *BMC Psychiatry* 17(1): 26. <http://dx.doi.org/10.1186/s12888-016-1182-1>

(Available in free full text) Background Patients seeking treatment may be assumed to prefer a psychiatrist who suggests a new treatment with confidence and optimism. Yet, this might not apply uniformly to all patients. In this study, we tested the hypothesis that new patients prefer psychiatrists who present treatments optimistically, whilst patients with longer-term experience of mental health care may rather prefer more cautious psychiatrists. Methods In an experimental study, we produced video-clips of four psychiatrists, each suggesting a pharmacological and a psychological treatment once with optimism and once with caution. 100 'new' patients with less than 3 months experience of mental health care and 100 'long-term' patients with more than one year of experience were shown a random selection of one video-clip from each psychiatrist, always including an optimistic and a cautious suggestion of each treatment. Patients rated their preferences for psychiatrists on Likert type scales. Differences in subgroups with different age (18–40 vs. 41–65 years), gender, school leaving age ( $\leq 16$  vs.  $> 16$  years), and diagnosis (ICD 10 F2 vs. others) were explored. Results New patients preferred more optimistic treatment suggestions, whilst there was no preference among long-term patients. The interaction effect between preference for treatment presentations and experience of patients was significant (interaction p-value = 0.003). Findings in subgroups were similar. Conclusion In line with the hypothesis, psychiatrists should suggest treatments with optimism to patients with little experience of mental health care. However, this rule does not apply to longer-term patients, who may have experienced treatment failures in the past.

Ravindran, A. V., L. G. Balneaves, et al. (2016). **"Canadian network for mood and anxiety treatments (CANMAT) 2016 clinical guidelines for the management of adults with major depressive disorder: Section 5. Complementary and alternative medicine treatments."** *The Canadian Journal of Psychiatry* 61(9): 576-587. <http://cpa.sagepub.com/content/61/9/576.abstract>

(Available in free full text) Background: The Canadian Network for Mood and Anxiety Treatments (CANMAT) conducted a revision of the 2009 guidelines by updating the evidence and recommendations. The scope of the 2016 guidelines remains the management of major depressive disorder (MDD) in adults, with a target audience of psychiatrists and other mental health professionals. Methods: Using the question-answer format, we conducted a systematic literature search focusing on systematic reviews and meta-analyses. Evidence was graded using CANMAT-defined criteria for level of evidence. Recommendations for lines of treatment were based on the quality of evidence and clinical expert consensus. "Complementary and Alternative Medicine Treatments" is the fifth of six sections of the 2016 guidelines. Results: Evidence-informed responses were developed for 12 questions for 2 broad categories of complementary and alternative medicine (CAM) interventions: 1) physical and meditative treatments (light therapy, sleep deprivation, exercise, yoga, and acupuncture) and 2) natural health products (St. John's wort, omega-3 fatty acids; S-adenosyl-L-methionine [SAM-e], dehydroepiandrosterone, folate, Crocus sativus, and others). Recommendations were based on available data on efficacy, tolerability, and safety. Conclusions: For MDD of mild to moderate severity, exercise, light therapy, St. John's wort, omega-3 fatty acids, SAM-e, and yoga are recommended as first- or second-line treatments. Adjunctive exercise and adjunctive St. John's wort are second-line recommendations for moderate to severe MDD. Other physical treatments and natural health products have less evidence but may be considered as third-line treatments. CAM treatments are generally well tolerated. Caveats include methodological limitations of studies and paucity of data on long-term outcomes and drug interactions.

Redmore, J., R. Kipping, et al. (2016). **"Analysis of trends in adolescent suicides and accidental deaths in England and Wales, 1972–2011."** *The British Journal of Psychiatry* 209(4): 327-333

(Available in free full text) Background Previous analyses of adolescent suicides in England and Wales have focused on short time periods. Aims To investigate trends in suicide and accidental deaths in adolescents between 1972 and 2011. Method Time trend analysis of rates of suicides and deaths from accidental poisoning and hanging in 10- to 19-year-olds by age, gender and deprivation. Rate ratios were estimated for 1982–1991, 1992–2001 and 2002–2011 with 1972–1981 as comparator. Results Suicide rates have remained stable in 10- to 14-year-olds, with strong evidence for a reduction in accidental deaths. In males aged 15–19, suicide rates peaked in 2001 before declining. Suicide by hanging is the most common method of suicide. Rates were higher in males and in 15- to 19-year-olds living in more deprived areas. Conclusions Suicide rates in adolescents are at their lowest since the early 1970s with no clear evidence that changes in coroners' practices underlie this trend.

Rice, F., O. Eyre, et al. (2017). **"Adolescent depression and the treatment gap."** *The Lancet Psychiatry* 4(2): 86-87. [http://dx.doi.org/10.1016/S2215-0366\(17\)30004-4](http://dx.doi.org/10.1016/S2215-0366(17)30004-4)

(Available in free full text) Adolescence is an important risk period for the development of depression, when the rates of major depressive disorder and symptoms of depression rise markedly.<sup>1</sup> Depressive symptoms and disorders are common in adolescence and are associated with poor long-term mental health, social, and educational outcomes. Adolescent major depressive disorder is often unrecognised and untreated despite evidence that duration of untreated depressive illness is a key factor in predicting recurrence in adult life. An Article in this issue of *Lancet Psychiatry* shows the beneficial effect of mental health service contact during adolescence on subsequent depressive symptomatology. In a longitudinal community study, Neufeld and colleagues show that, among adolescents aged 14 years with a DSM-IV psychiatric disorder, use of mental health services substantially reduces depressive symptomatology at the 36-month follow-up. Thus, by age 17 years, the odds of adolescents who had a disorder but did not contact mental health services reporting symptoms of depression in the clinical range was seven times higher than in adolescents who did access services. Importantly, these findings were generated using statistical methods that balance confounders across intervention and control groups (similar to what is done in randomised

controlled trials) ... In conclusion, the study by Neufeld and colleagues is important in empirically showing the long-term beneficial effects of prompt treatment of adolescent mental health problems and provides hope that the benefits could be achieved with interventions of relatively short duration.

Riecher-Rössler, A. (2016). **"Sex and gender differences in mental disorders."** *The Lancet Psychiatry*. [http://dx.doi.org/10.1016/S2215-0366\(16\)30348-0](http://dx.doi.org/10.1016/S2215-0366(16)30348-0)

Summary: Increased prevalence, severity, and burden of anxiety, trauma-related and stress-related disorders in women compared with men has been well documented. Evidence from a variety of fields has emerged suggesting that sex hormones, particularly oestradiol and progesterone, play a significant part in generation of these sex differences. In this Series paper, we aim to integrate the literature reporting on the effects of sex hormones on biological, behavioural, and cognitive pathways, to propose two broad mechanisms by which oestradiol and progesterone influence sex differences in anxiety disorders: augmentation of vulnerability factors associated with anxiety disorder development; and facilitation of the maintenance of anxious symptoms post-development. The implications for future research, along with novel approaches to psychological and pharmacological treatment of anxiety disorders, are also considered.

Schaakxs, R., H. C. Comijs, et al. (2017). **"Age-related variability in the presentation of symptoms of major depressive disorder."** *Psychological Medicine* 47(3): 543-552. <https://www.cambridge.org/core/article/div-class-title-age-related-variability-in-the-presentation-of-symptoms-of-major-depressive-disorder-div/B83301A906F2EC6550043672883D6ED4>

Background The heterogeneous aetiology of major depressive disorder (MDD) might affect the presentation of depressive symptoms across the lifespan. We examined to what extent a range of mood, cognitive, and somatic/vegetative depressive symptoms were differentially present depending on patient's age. Method Data came from 1404 participants with current MDD (aged 18–88 years) from two cohort studies: the Netherlands Study of Depression and Anxiety (NESDA) and the Netherlands Study of Depression in Older Persons (NESDO). Associations between age (per 10 years) and 30 depressive symptoms as well as three symptom clusters (mood, cognitive, somatic/vegetative) were assessed using logistic and linear regression analyses. Results Depression severity was found to be stable with increasing age. Nevertheless, 20 (67%) out of 30 symptoms were associated with age. Most clearly, with ageing there was more often early morning awakening [odds ratio (OR) 1.47, 95% confidence interval (CI) 1.36–1.60], reduced interest in sex (OR 1.42, 95% CI 1.31–1.53), and problems sleeping during the night (OR 1.33, 95% CI 1.24–1.43), whereas symptoms most strongly associated with younger age were interpersonal sensitivity (OR 0.72, 95% CI 0.66–0.79), feeling irritable (OR 0.73, 95% CI 0.67–0.79), and sleeping too much (OR 0.75, 95% CI 0.68–0.83). The sum score of somatic/vegetative symptoms was associated with older age ( $B = 0.23$ ,  $p < 0.001$ ), whereas the mood and cognitive sum scores were associated with younger age ( $B = -0.20$ ,  $p < 0.001$ ;  $B = -0.04$ ,  $p = 0.004$ ). Conclusions Depression severity was found to be stable across the lifespan, yet depressive symptoms tend to shift with age from being predominantly mood-related to being more somatic/vegetative. Due to the increasing somatic presentation of depression with age, diagnoses may be missed.

Shackman, A. J., D. P. Tromp, et al. (2016). **"Dispositional negativity: An integrative psychological and neurobiological perspective."** *Psychol Bull* 142(12): 1275-1314. <https://www.ncbi.nlm.nih.gov/pubmed/27732016>

Dispositional negativity—the propensity to experience and express more frequent, intense, or enduring negative affect—is a fundamental dimension of childhood temperament and adult personality. Elevated levels of dispositional negativity can have profound consequences for health, wealth, and happiness, drawing the attention of clinicians, researchers, and policymakers. Here, we highlight recent advances in our understanding of the psychological and neurobiological processes linking stable individual differences in dispositional negativity to momentary emotional states. Self-report data suggest that 3 key pathways—increased stressor reactivity, tonic increases in negative affect, and increased stressor exposure—explain most of the heightened negative affect that characterizes individuals with a more negative disposition. Of these 3 pathways, tonically elevated, indiscriminate negative affect appears to be most central to daily life and most relevant to the development of psychopathology. New behavioral and biological data provide insights into the neural systems underlying these 3 pathways and motivate the hypothesis that seemingly "tonic" increases in negative affect may actually reflect increased reactivity to stressors that are remote, uncertain, or diffuse. Research focused on humans, monkeys, and rodents suggests that this indiscriminate negative affect reflects trait-like variation in the activity and connectivity of several key brain regions, including the central extended amygdala and parts of the prefrontal cortex. Collectively, these observations provide an integrative psychobiological framework for understanding the dynamic cascade of processes that bind emotional traits to emotional states and, ultimately, to emotional disorders and other kinds of adverse outcomes.

Skapinakis, P., D. Caldwell, et al. (2016). **"A systematic review of the clinical effectiveness and cost-effectiveness of pharmacological and psychological interventions for the management of obsessive-compulsive disorder in children/adolescents and adults."** *Health Technol Assess* 20(43). <http://journalslibrary.nihr.ac.uk/hta/hta20430>

(Available in free full text) Objectives To determine the clinical effectiveness, acceptability and cost-effectiveness of pharmacological and psychological interventions for the treatment of OCD in children, adolescents and adults. Data sources We searched the Cochrane Collaboration Depression, Anxiety and Neurosis Trials Registers, which includes trials from routine searches of all the major databases. Searches were conducted from inception to 31 December 2014. Review methods We undertook a systematic review and network meta-analysis (NMA) of the clinical effectiveness and acceptability of available treatments. Outcomes for effectiveness included mean differences in the total scores of the Yale-Brown Obsessive-Compulsive Scale or its children's version and total dropouts for acceptability. For the cost-effectiveness analysis, we developed a probabilistic model informed by the results of the NMA. All analyses were performed using OpenBUGS version 3.2.3 (members of OpenBUGS Project Management Group; see [www.openbugs.net](http://www.openbugs.net)). Results We included 86 randomised controlled trials (RCTs) in our systematic review. In the NMA we included 71 RCTs (54 in adults and 17 in children and adolescents) for effectiveness and 71 for acceptability (53 in adults and 18 in children and adolescents), comprising 7643 and 7942 randomised patients available for analysis, respectively. In general, the studies were of medium quality. The results of the NMA showed that in adults all selective serotonin reuptake inhibitors (SSRIs) and clomipramine had greater effects than drug placebo. There were no differences between SSRIs, and a trend for clomipramine to be more effective did not reach statistical significance. All active psychological therapies had greater effects than drug placebo. Behavioural therapy (BT) and cognitive therapy (CT) had greater effects than psychological placebo, but cognitive-behavioural therapy (CBT) did not. BT and CT, but not CBT, had greater effects than medications, but there are considerable uncertainty and methodological limitations that should be taken into account. In children and adolescents, CBT and BT had greater effects than drug placebo, but differences compared with psychological placebo did not reach statistical significance. SSRIs as a class showed a trend for superiority over drug placebo, but the difference did not reach statistical significance. However, the superiority of some individual drugs (fluoxetine, sertraline) was marginally statistically significant. Regarding acceptability, all interventions except clomipramine had good tolerability. In adults, CT and BT had the highest probability of being most cost-effective at conventional National Institute for Health and Care Excellence thresholds. In children and adolescents, CBT or CBT combined with a SSRI were more likely to be cost-effective. The

results are uncertain and sensitive to assumptions about treatment effect and the exclusion of trials at high risk of bias. Limitations The majority of psychological trials included patients who were taking medications. There were few studies in children and adolescents. Conclusions In adults, psychological interventions, clomipramine, SSRIs or combinations of these are all effective, whereas in children and adolescents, psychological interventions, either as monotherapy or combined with specific SSRIs, were more likely to be effective. Future RCTs should improve their design, in particular for psychotherapy or combined interventions.

Slaght, M., J. S. Dubas, et al. (2016). **"Differences in sensitivity to parenting depending on child temperament: A meta-analysis."** *Psychol Bull* 142(10): 1068-1110. <https://www.ncbi.nlm.nih.gov/pubmed/27513919>

Several models of individual differences in environmental sensitivity postulate increased sensitivity of some individuals to either stressful (diathesis-stress), supportive (vantage sensitivity), or both environments (differential susceptibility). In this meta-analysis we examine whether children vary in sensitivity to parenting depending on their temperament, and if so, which model can best be used to describe this sensitivity pattern. We tested whether associations between negative parenting and negative or positive child adjustment as well as between positive parenting and positive or negative child adjustment would be stronger among children higher on putative sensitivity markers (difficult temperament, negative emotionality, surgency, and effortful control). Longitudinal studies with children up to 18 years ( $k = 105$  samples from 84 studies,  $N_{\text{mean}} = 6,153$ ) that reported on a parenting-by-temperament interaction predicting child adjustment were included. We found 235 independent effect sizes for associations between parenting and child adjustment. Results showed that children with a more difficult temperament (compared with those with a more easy temperament) were more vulnerable to negative parenting, but also profited more from positive parenting, supporting the differential susceptibility model. Differences in susceptibility were expressed in externalizing and internalizing problems and in social and cognitive competence. Support for differential susceptibility for negative emotionality was, however, only present when this trait was assessed during infancy. Surgency and effortful control did not consistently moderate associations between parenting and child adjustment, providing little support for differential susceptibility, diathesis-stress, or vantage sensitivity models. Finally, parenting-by-temperament interactions were more pronounced when parenting was assessed using observations compared to questionnaires.

Stansfeld, S. A., C. Clark, et al. (2017). **"Childhood adversity and midlife suicidal ideation."** *Psychological Medicine* 47(2): 327-340. <https://www.cambridge.org/core/article/div-class-title-childhood-adversity-and-midlife-suicidal-ideation-div/92AE7B9CC6583EF775973E49B5CF0D5E>

(Available in free full text) Background Childhood adversity predicts adolescent suicidal ideation but there are few studies examining whether the risk of childhood adversity extends to suicidal ideation in midlife. We hypothesized that childhood adversity predicts midlife suicidal ideation and this is partially mediated by adolescent internalizing disorders, externalizing disorders and adult exposure to life events and interpersonal difficulties. Method At 45 years, 9377 women and men from the UK 1958 British Birth Cohort Study participated in a clinical survey. Childhood adversity was prospectively assessed at the ages of 7, 11 and 16 years. Suicidal ideation at midlife was assessed by the depressive ideas subscale of the Revised Clinical Interview Schedule. Internalizing and externalizing disorders were measured by the Rutter scales at 16 years. Life events, periods of unemployment, partnership separations and alcohol dependence were measured through adulthood. Results Illness in the household, paternal absence, institutional care, parental divorce and retrospective reports of parental physical and sexual abuse predicted suicidal ideation at 45 years. Three or more childhood adversities were associated with suicidal ideation at 45 years [odds ratio (OR) 4.31, 95% confidence interval (CI) 2.67–6.94]. Psychological distress at 16 years partially mediated the associations of physical abuse (OR 3.41, 95% CI 2.29–5.75), sexual abuse (OR 4.99, 95% CI 2.90–11.16) with suicidal ideation. Adult life events partially mediated the association of parental divorce (OR 6.34, 95% CI –7.16 to 36.75) and physical (OR 9.59, 95% CI 4.97–27.88) and sexual abuse (OR 6.59, 95% CI 2.40–38.36) with suicidal ideation at 45 years. Conclusions Adversity in childhood predicts suicidal ideation in midlife, partially mediated by adolescent internalizing and externalizing disorders, adult life events and interpersonal difficulties. Understanding the pathways from adversity to suicidal ideation can inform suicide prevention and the targeting of preventive interventions.

Trevis, K. J., N. M. McLachlan, et al. (2016). **"Psychological mediators of chronic tinnitus: The critical role of depression."** *Journal of Affective Disorders* 204: 234-240. <http://www.sciencedirect.com/science/article/pii/S0165032716307261>

Background Maintenance of chronic tinnitus has been proposed to result from a vicious cycle of hypervigilance occurring when a phantom sound is associated with anxiety and limbic system overactivity. Depression, obsessive-compulsiveness, illness attitudes and coping strategies are known to impact tinnitus, but their relationship with the vicious cycle is unknown. As such, we aimed to identify psychological mediators of the vicious cycle. We also examined the relationship between coping strategies and any identified mediators to facilitate the translation of our research to treatment settings. Methods We comprehensively assessed a heterogeneous community sample of 81 people with chronic tinnitus who completed measures assessing their tinnitus and psychological wellbeing. Specifically, we examined the mediating role of depressive symptoms, illness attitudes, and obsessive-compulsiveness in the vicious cycle. Results While the predicted relationship between tinnitus handicap and anxiety was observed, this was fully mediated by depressive symptoms. In addition, we identified avoidant behaviours and self-blame as maladaptive coping strategies in people with chronic tinnitus and depressive symptoms, identifying potential new treatment targets. Limitations This work requires replication in a clinical cohort of people with chronic tinnitus, and further investigations of the role of coping strategies. Conclusions These results extend our understanding of the complex role of psychology in the experience of tinnitus, highlighting the importance of depressive symptoms that may be underpinned by functional disruption of specific neurocognitive networks. We have also identified depressive symptoms and maladaptive coping strategies as new treatment targets to improve the health wellbeing of people with chronic tinnitus.