26 depression alliance abstracts, jan '12

(Myhrene Steffenak, Nordström et al. ; Adams, Santo et al. 2011; Dewa, Thompson et al. 2011; Gebauer, Leary et al. 2011; Gerber, Kocsis et al. 2011; Blazer 2012; Blier 2012; Campos-Rodriguez, Martinez-Garcia et al. 2012; Copeland, Shanahan et al. 2012; Fabre and Smith 2012; Hatcher and Arroll 2012; Jacobs, Miller et al. 2012; Kasen, Wickramaratne et al. 2012; Klainin-Yobas, Cho et al. 2012; Li, Bai et al. 2012; Loo, Alonzo et al. 2012; MacCoon, Imel et al. 2012; Miller, Wickramaratne et al. 2012; Ohayon, Dauvilliers et al. 2012; Seritan, Hunt et al. 2012; Siegenthaler, Munder et al. 2012; Simms, Prisciandaro et al. 2012; Thoma, McKay et al. 2012; Whittaker, Merry et al. 2012; Zisook, Downs et al. 2012; Zubkoff, Young-Xu et al. 2012)

Adams, R. E., J. B. Santo, et al. (2011). "The presence of a best friend buffers the effects of negative experiences." Dev Psychol **47**(6): 1786-1791. http://www.ncbi.nlm.nih.gov/pubmed/21895364.

The goal of the current study was to examine how the presence of a best friend might serve as protection against the effect of negative experiences on global self-worth and the hypothalamic-pituitary-adrenocortical axis (HPA axis). A total of 103 English-speaking male (n = 55) and female (n = 48) participants from Grade 5 (M = 10.27 years) and Grade 6 (M = 11.30 years) completed booklets about their experiences that occurred 20 min previously and how they felt about themselves at the moment, and they provided saliva multiple times per day over the course of 4 consecutive days. Having a best friend present during an experience significantly buffered the effect of the negativity of the experience on cortisol and global self-worth. When a best friend was not present, there was a significant increase in cortisol and a significant decrease in global self-worth as the negativity of the experience increased. When a best friend was present, there was less change in cortisol and global self-worth due to the negativity of the experience.

Blazer, D. (2012). "Religion/spirituality and depression: What can we learn from empirical studies?" American Journal of Psychiatry **169**(1): 10-12. http://dx.doi.org/10.1176/appi.ajp.2011.11091407.

(Free full text editorial): In this issue, Miller and colleagues present data from a longitudinal study of offspring from a sample of depressed and nondepressed subjects to determine if religion or spirituality influenced the onset and course of major depression over the 10 years of follow-up. They found, among individuals who affiliated as either Protestant or Catholic, that subjects who reported religion or spirituality as highly important were 76% less likely to experience an episode of major depression during the follow-up. In contrast, religious attendance and denomination had no impact. The protective effect was experienced primarily among subjects at high risk because their parents experienced depression. Though this study is the first long-term outcome study on the impact of religion or spirituality on the emergence of depression, it confirms a growing literature, including a previous study by the authors, that generally supports the benefit of religion or spirituality (usually religious participation) in decreasing the frequency and recurrence of depressive disorders. Studies to date have suggested three conclusions, all of which can be debated: 1) individuals with no religious affiliation are at greater risk for depressive symptoms and disorders, 2) people involved in their faith communities may be at reduced risk for depression, and 3) private religious activities and beliefs are not strongly related to risk for depression. Depression has been the most frequently studied of the psychiatric disorders in relationship to religion or spirituality, in large part because of the overlap in expression of both. For example, guilt associated with depression often is connected with a religious belief system, and apparent depressive symptoms (such as the "dark night of the soul") are associated with religious experiences.

Blier, P. (2012). "Combined Treatments for Depression as for Other Medical Disorders." American Journal of Psychiatry **169**(1): 95-95. http://dx.doi.org/10.1176/appi.ajp.2011.11071055.

To the Editor: We read with great interest the article by Dr. Rush et al. on the Combining Medications to Enhance Depression Outcomes (CO-MED) study (+1) and the editorial by Dr. Coryell (+2) in the July 2011 issue of the Journal. The overall result of this large-scale trial is that a single antidepressant produced the same remission results as did combinations started 1 week after treatment initiation. Our main issue with CO-MED, apart from its not being a double-blind study, is the dosing of the antidepressants. The CO-MED study did not adhere to an important rule of combination treatment in medicine: use similar and/or effective dosages of both agents. For instance, when treating asthma, physicians should administer standard doses of both a β2-adrenergic agonist and an inhaled steroid, not lower doses. Physicians were aware of the dosages used throughout the study, and despite the use of a decision tree involving tolerability and response for titration, the dose of escitalopram was near the maximum in the monotherapy arm and was significantly lower when combined with bupropion. Consequently, the dosage issue has not been "credibly dismissed" in the CO-MED study (+2). One possible explanation for the identical remission rates in the venlafaxine-mirtazapine arm and the escitalopram arm is that the combination arm was again underdosed. Several studies supporting the superiority of this combination consistently used higher dosages. The mean of the daily doses of mirtazapine was only 20 mg in the CO-MED study, which is below its minimal effective daily dose of 30 mg. The mean of the daily doses of venlafaxine was 192 mg, which is below its noradrenergic range of 225 mg/day (+3). Rush et al. (+1) point out that no difference in remission rates was observed between the 86 patients who reached the daily regimen of 225 mg of venlafaxine and 30 mg of mirtazapine and those who were in the escitalopram arm. However, the authors indicate that this regimen was achieved "at any time during treatment." It is unclear how long these dosages were maintained. In two double-blind studies (+4, +5), we doubled the remission rates using adequately dosed combinations of mirtazapine and other antidepressants, and the dropout rates were below 15%; no patients in the fixed venlafaxine (225 mg) and mirtazapine (30 mg) group dropped out because of side effects. The double-blind structure of our studies likely contributed to patients tolerating side effects because neither they nor the investigators knew if a dosage titration was used. On the one hand, the CO-MED study results may reflect the underdosing that can happen in a community sample. On the other hand, this approach limits our ability to validate the superiority of the venlafaxine-mirtazapine combination because most patients were on a dosage of venlafaxine that did not inhibit norepinephrine reuptake and a sedative/non-antidepressant dosage of mirtazapine during the trial.
More studies on combining antidepressant drugs from treatment initiation are needed, especially those that keep in mind the above-mentioned pitfalls. Nevertheless, a crucial take-home message from the CO-MED study is that if patients are treated with a combination of antidepressants, they should be receiving adequate dosages because a single medication may do just as well.

Campos-Rodriguez, F., M. A. Martinez-Garcia, et al. (2012). "Cardiovascular Mortality in Women With Obstructive Sleep Apnea With or Without Continuous Positive Airway Pressure Treatment." Annals of Internal Medicine **156**(2): 115-122. http://www.annals.org/content/156/2/115.abstract.

Background: Obstructive sleep apnea (OSA) is a risk factor for cardiovascular death in men, but whether it is also a risk factor in women is unknown. Objective: To investigate whether OSA is a risk factor for cardiovascular death in women and assess whether continuous positive airway pressure (CPAP) treatment is associated with a change in risk.Design: Prospective, observational cohort study.Setting: 2 sleep clinics in Spain.Patients: All women consecutively referred for suspected OSA between 1998 and 2007. Intervention: Every woman had a diagnostic sleep study. Women with an apnea–hypopnea index

(AHI) less than 10 were the control group. Obstructive sleep apnea was diagnosed when the AHI was 10 or higher (classified as mild to moderate [AHI of 10 to 29] or severe [AHI ≥30]). Patients with OSA were classified as CPAP-treated (adherence ≥4 hours per day) or untreated (adherence <4 hours per day or not prescribed). Participants were followed until December 2009.Measurements: The end point was cardiovascular death.Results: 1116 women were studied (median follow-up, 72 months [interquartile range, 52 to 88 months]). The control group had a lower cardiovascular mortality rate (0.28 per 100 person-years [95% CI, 0.10 to 0.91]) than the untreated groups with mild to moderate OSA (0.94 per 100 person-years [CI, 0.10 to 2.40]; P = 0.034) or severe OSA (3.71 per 100 person-years [CI, 0.09 to 7.50]; P < 0.001). Compared with the control group, the fully adjusted hazard ratios for cardiovascular mortality were 3.50 (CI, 1.23 to 9.98) for the untreated, severe OSA group; 0.55 (CI, 0.17 to 1.74) for the CPAP-treated, severe OSA group; 1.60 (CI, 0.52 to 4.90) for the untreated, mild to moderate OSA group; and 0.19 (CI, 0.02 to 1.67) for the CPAP-treated, mild to moderate OSA group.Limitation: The study was observational and not randomized, and OSA was diagnosed by 2 different methods. Conclusion: Severe OSA is associated with cardiovascular death in women, and adequate CPAP treatment may reduce this risk. (And the BMJ commented "These findings, although preliminary, suggest that we should be paying as much attention to obstructive sleep apnoea in women as we do in men, say the authors. Between 2% and 3% of middle aged women have the disorder, but it is harder to recognise because symptoms tend to include depression, anxiety, or insomnia rather than the daytime sleepiness and witnessed apnoea seen in men.")

Copeland, W. E., L. Shanahan, et al. (2012). "Cumulative Depression Episodes Predict Later C-Reactive Protein Levels: A Prospective Analysis." Biological Psychiatry **71**(1): 15-21. http://linkinghub.elsevier.com/retrieve/pii/S0006322311009231?showall=true.

Depression is associated with elevated levels of the inflammation marker C-reactive protein (CRP); yet, the direction of this association remains unclear. This study tested bi-directional longitudinal associations between CRP and depression in a sample of adolescents and young adults. The study compared the effect of current depression with the effect of cumulative episodes of depression over time. Nine waves of data from the prospective population-based Great Smoky Mountains Study (n = 1420) were used, covering children in the community aged 9 to 16, 19, and 21 years old. Structured interviews were used to assess depressive symptoms, depression diagnosis, and cumulative depressive episodes. Bloodspots were collected at each observation and assayed for CRP levels. CRP levels were not associated with later depression status. In contrast, all depression-related variables displayed evidence of association with later CRP levels. The associations with depressive symptoms and diagnostic status were attenuated after controlling for covariates, particularly body mass index, smoking, and medication use. The effect of cumulative depressive episodes, however, continued to be significant after accounting for a range of covariates. Body mass index, smoking behavior, and recent infections may mediate a portion of the effect of cumulative episodes on later CRP, but cumulative depressive episodes continued to predict CRP levels independently. The occurrence of multiple depressive episodes exerted the greatest effect on later CRP levels. This suggests that risk for the diseases of middle and old age—cardiovascular and metabolic disease—may begin in childhood and depend, in part, on long-term emotional functioning.

Dewa, C. S., A. H. Thompson, et al. (2011). "The association of treatment of depressive episodes and work productivity." Can J Psychiatry **56**(12): 743-750. http://publications.cpa-apc.org/browse/documents/552.

(Free full text available) OBJECTIVE: About one-third of the annual $51 billion cost of mental illnesses is related to productivity losses. However, few studies have examined the association of treatment and productivity. The purpose of our research is to examine the association of depression and its treatment and work productivity. METHODS: Our analyses used data from 2737 adults aged between 18 and 65 years who participated in a large-scale community survey of employed and recently employed people in Alberta. Using the World Health Organization's Health and Work Performance Questionnaire, a productivity variable was created to capture high productivity (above the 75th percentile). We used regression methods to examine the association of mental disorders and their treatment and productivity, controlling for demographic factors and job characteristics. RESULTS: In the sample, about 8.5% experienced a depressive episode in the past year. The regression results indicated that people who had a severe depressive episode were significantly less likely to be highly productive. Compared with people who had a moderate or severe depressive episode who did not have treatment, those who did have treatment were significantly more likely to be highly productive. However, about one-half of workers with a moderate or severe depressive episode did not receive treatment. CONCLUSIONS: Our results corroborate those in the literature that indicate mental disorders are significantly associated with decreased work productivity. In addition, these findings indicate that treatment for these disorders is significantly associated with productivity. Our results also highlight the low proportion of workers with a mental disorder who receive treatment.

Fabre, L. F. and L. C. Smith (2012). "The effect of major depression on sexual function in women." The Journal of Sexual Medicine **9**(1): 231-239. http://dx.doi.org/10.1111/j.1743-6109.2011.02445.x.

(Free full text available): Introduction. Eleven hundred eighty-four depressed women were entered into five short-term (8 weeks) studies of gepirone-extended release (ER) vs. placebo for treatment of major depressive disorder (MDD) (134001, 134002, and 134017), or atypical depressive disorder (ADD) (134004 and 134006). The effect of depression on sexual function was examined prior to treatment. Aim. To determine the effect of depression on the prevalence of Diagnostic and Statistical Manual Fourth Edition (DSM-IV) sexual dysfunction diagnoses and the Derogatis Inventory of Sexual Function (DISF) total score and domain scores and to measure the effect of severity of depression. Main Outcome Measures. Hamilton Depression Rating Scale (HAMD-17), DSM-IV diagnoses, and DISF total and domain scores. Methods. DSM-IV diagnoses—hypoactive sexual desire disorder (HSDD), sexual aversion disorder (SAD), female arousal disorder (FAD), and female orgasmic disorder (FOD)—were made by a trained psychiatrist. The HAMD-17 measured antidepressant efficacy. The DISF or its self-report version measured sexual function. To access the effect of severity of depression, baseline HAMD-17 scores were stratified as mild (<18), moderate (19–22), severe (23–25), or extreme (26–33). All measures were taken at baseline. Results. In this depressed female population, prevalence rates were HSDD 17.7%, SAD 3.4%, FAD 5.8%, and FOD 7.7%. These rates for females are within the reported normal (nondepressed) values. However, DISF scores are one or more standard deviations below population norms for total score. DISF domains are not equally affected: orgasm is most impaired, while sexual desire and sexual arousal are somewhat preserved. Higher HAMD scores result in lower DISF scores (greater sexual dysfunction). Conclusions. In women, depression affects DISF scores more than DSM-IV diagnoses for sexual dysfunction. With increasing severity of depression (increased HAMD scores), sexual dysfunction becomes greater (lower DISF scores). For equal HAMD scores, DISF scores for MDD and ADD are the same. Fabre LF and Smith LC. The effect of major depression on sexual function in women.

Gebauer, J. E., M. R. Leary, et al. (2011). "Unfortunate first names: Effects of name-based relational devaluation and interpersonal neglect." Social psychological and personality science. http://spp.sagepub.com/content/early/2011/12/22/1948550611431644.abstract.

(Available in free full text) Can negative first names cause interpersonal neglect? Study 1 (N = 968) compared extremely negatively named online-daters with extremely positively named online-daters. Study 2 (N = 4,070) compared less

extreme groups—namely, online-daters with somewhat unattractive versus somewhat attractive first names. Study 3 (N = 6,775) compared online-daters with currently popular versus currently less popular first names, while controlling for name-popularity at birth. Across all studies, negatively named individuals were more neglected by other online-daters, as indicated by fewer first visits to their dating profiles. This form of neglect arguably mirrors a name-based life history of neglect, discrimination, prejudice, or even ostracism. Supporting this argument, neglect mediated the relation between negative names and lower self-esteem, more frequent smoking, and less education. These results are consistent with the name-based interpersonal neglect hypothesis: Negative names evoke negative interpersonal reactions, which in turn influence people's life outcomes for the worse.

Gerber, A. J., J. H. Kocsis, et al. (2011). "A quality-based review of randomized controlled trials of psychodynamic psychotherapy." Am J Psychiatry **168**(1): 19-28. http://www.ncbi.nlm.nih.gov/pubmed/20843868.

OBJECTIVE: The Ad Hoc Subcommittee for Evaluation of the Evidence Base for Psychodynamic Psychotherapy of the APA Committee on Research on Psychiatric Treatments developed the Randomized Controlled Trial Psychotherapy Quality Rating Scale (RCT-PQRS). The authors report results from application of the RCT-PQRS to 94 randomized controlled trials of psychodynamic psycho-therapy published between 1974 and May 2010. METHOD: Five psychotherapy researchers from a range of therapeutic orientations rated a single published paper from each study. RESULTS: The RCT-PQRS had good interrater reliability and internal consistency. The mean total quality score was 25.1 (SD=8.8). More recent studies had higher total quality scores. Sixty-three of 103 comparisons between psychodynamic psychotherapy and a nondynamic comparator were of "adequate" quality. Of 39 comparisons of a psychodynamic treatment and an "active" comparator, six showed dynamic treatment to be superior, five showed dynamic treatment to be inferior, and 28 showed no difference (few of which were powered for equivalence). Of 24 adequate comparisons of psychodynamic psychotherapy with an "inactive" comparator, 18 found dynamic treatment to be superior. CONCLUSIONS: Existing randomized controlled trials of psychodynamic psychotherapy are promising but mostly show superiority of psychodynamic psychotherapy to an inactive comparator. This would be sufficient to make psychodynamic psychotherapy an "empirically validated" treatment (per American Psychological Association Division 12 standards) only if further randomized controlled trials of adequate quality and sample size replicated findings of existing positive trials for specific disorders. We do not yet know what will emerge when other psychotherapies are subjected to this form of quality-based review.

Hatcher, S. and B. Arroll (2012). "Newer antidepressants for the treatment of depression in adults." BMJ **344**. http://www.bmj.com/content/344/bmj.d8300.

Antidepressants are prescribed mainly for people with depression, although some are also used for anxiety disorders and other conditions, including chronic pain and enuresis. They are one of the most commonly prescribed medications (more than 43 million prescriptions were written for them between April 2010 and March 2011 in England). Antidepressants were developed in the 1950s, and their mechanism of action is thought to be by increasing the levels of extracellular synaptic neurotransmitters such as serotonin, noradrenaline, and dopamine; they also have other effects, including increasing hippocampal neurogenesis. The original antidepressants were known as tricyclics because of their chemical structure. Since the 1980s a new generation of antidepressants has been developed and marketed based on their mode of action. The nomenclature for referring to these newer drugs is confusing as they can be classified by several criteria, including the target molecule and the number of neurotransmitter sites involved ... The focus of this article is on selective serotonin reuptake inhibitors (SSRIs) and other newer antidepressants (using the World Health Organization's nomenclature (box 1)) and their use in adults presenting with depressive disorders. We have excluded non-reversible monoamine oxidase inhibitors such as phenelzine as recent guidelines recommend these should usually be prescribed only by specialist mental health professionals. Our article does not cover the use of antidepressants in children and adolescents or depression in bipolar disorder. See recent reviews for discussion of selective serotonin reuptake inhibitors in children and adolescents4 and the long term treatment of depression with SSRIs.

Jacobs, M., L. Miller, et al. (2012). "Family religion and psychopathology in children of depressed mothers: Ten-year follow-up." J Affect Disord **136**(3): 320-327. http://www.ncbi.nlm.nih.gov/pubmed/22177740.

BACKGROUND: Previously we found that transmission of religion from mother to adult offspring as measured by correlations on ratings of personal importance of religion and frequency of attendance at religious services was hindered by maternal depression. Concordance of denomination, a measure indicating successful transmission of denomination within a mother and offspring pair, was associated with a 71% decreased risk of major depressive disorder (MDD) in offspring. This study attempts to replicate the findings in a younger generation of mothers who were the original offspring or spouse of the original offspring in the previous study, and their offspring. METHODS: Mothers (N=45) and offspring (N=78) were assessed for MDD and anxiety using semi-structured clinical interviews (The Diagnostic Schedule for Affective Disorders and Schizophrenia Modified for the Anxiety Disorders) at two points across a ten-year interval. Religiosity was assessed by report of personal spirituality, frequency of attendance at religious services, and religious denomination RESULTS: Results partially replicate previous findings that maternal depression hinders the transmission of importance but not attendance or denomination to offspring. Concordance of denomination is protective, decreasing by 91% the likelihood of childhood anxiety or depression, independent of maternal depression. Limitations include small sample size that represents few denominations, limited assessments of religiosity, and inability to control for the possible confound of a close relationship between mother and offspring in our analyses. CONCLUSIONS: Family agreement and practice of religious denomination may be a robust protective source from MDD or anxiety for youth, independent of the effects of maternal depression.

Kasen, S., P. Wickramaratne, et al. (2012). "Religiosity and resilience in persons at high risk for major depression." Psychol Med **42**(3): 509-519. http://www.ncbi.nlm.nih.gov/pubmed/21849093.

BACKGROUND: Few studies have examined religiosity as a protective factor using a longitudinal design to predict resilience in persons at high risk for major depressive disorder (MDD). METHOD: High-risk offspring selected for having a depressed parent and control offspring of non-depressed parents were evaluated for psychiatric disorders in childhood/adolescence and at 10-year and 20-year follow-ups. Religious/spiritual importance, services attendance and negative life events (NLEs) were assessed at the 10-year follow-up. Models tested differences in relationships between religiosity/spirituality and subsequent disorders among offspring based on parent depression status, history of prior MDD and level of NLE exposure. Resilience was defined as lower odds for disorders with greater religiosity/spirituality in higher-risk versus lower-risk offspring. RESULTS: Increased attendance was associated with significantly reduced odds for mood disorder (by 43%) and any psychiatric disorder (by 53%) in all offspring; however, odds were significantly lower in offspring of non-depressed parents than in offspring of depressed parents. In analyses confined to offspring of depressed parents, those with high and those with average/low NLE exposure were compared: increased attendance was associated with significantly reduced odds for MDD, mood disorder and any psychiatric disorder (by 76, 69 and 64% respectively) and increased importance was associated with significantly reduced odds for mood disorder (by 74%) only in offspring of depressed parents with high NLE exposure. Moreover, those associations differed significantly between offspring of depressed parents with high NLE exposure and offspring

of depressed parents with average/low NLE exposure. CONCLUSIONS: Greater religiosity may contribute to development of resilience in certain high-risk individuals.

Klainin-Yobas, P., M. A. A. Cho, et al. (2012). "Efficacy of mindfulness-based interventions on depressive symptoms among people with mental disorders: A meta-analysis." International journal of nursing studies **49**(1): 109-121. http://linkinghub.elsevier.com/retrieve/pii/S0020748911003373?showall=true.

Objectives: Depression, a common mental health problem, is projected to be the second leading cause of disability for adults by year 2020. Mindfulness-based interventions (MFIs) have been integrated into therapeutic work on depression, but limited systematic reviews reported their efficacy on heterogeneous groups of mental disorders. This meta-analysis aimed to examine the efficacy of the MFIs on depressive symptoms in people with various mental disorders. Design: A meta-analysis of experimental and quasi-experimental studies was undertaken. Data sources: Multiple search strategies were undertaken to identify published and unpublished studies conducted between 1995 and 2011. Electronic databases used were Scopus, CINAHL, PubMed, ScienceDirect, PsyINFO, Dissertation Abstract International, Web of Science Index, Controlled-trial.com, and clinicaltrails.gov. Review methods: Data were extracted and appraised by two reviewers. For each study, the Quality Rating Index (QRI) and Code Sheet for Randomized Controlled Trials (CS-RCT) were used to assess methodological quality and extract relevant data respectively. Data were analysed and synthesized using PASW statistic 17.0 and Comprehensive Meta Analyses Software 2.0. Results: Thirty-nine studies conducted in ten countries were included and 105 effect sizes were calculated. Most studies utilised single group pretest–posttest quasi-experimental design, convenience sampling, and self-reported questionnaires. Between-group comparisons indicated that MFIs are superior to standard care in reducing depressive symptoms and preventing relapse with effect sizes ranging from 0.11 to 1.65. Exposure-based cognitive therapy (d=2.09) appeared to be the most efficacious intervention, followed by mindfulness-based stress reduction programme (d=1.92), acceptance-based behaviour therapy (d=1.33), and stress less with mindfulness (d=1.31). Effect sizes were significantly associated with the length of intervention sessions but not related to methodological quality of studies. Conclusion: The mindfulness-based interventions are efficacious for alleviating depressive symptoms in adults with mental disorders. The interventions could be used in conjunction with other treatments in clinical settings.

Li, C.-T., Y.-M. Bai, et al. (2012). "Association between antidepressant resistance in unipolar depression and subsequent bipolar disorder: cohort study." The British Journal of Psychiatry **200**(1): 45-51. http://bjp.rcpsych.org/content/200/1/45.abstract.

Background: People with major depressive disorder who fail to respond to adequate trials of antidepressant treatment may harbour hidden bipolar disorder. Aims: We aimed to compare the rates of a change in diagnosis to bipolar disorder among people with major depressive disorder with stratified responses to antidepressants during an 8-year follow-up period. Method: Information on individuals with major depressive disorder identified during 2000 (cohort 2000, n = 1485) and 2003 (cohort 2003, n = 2459) were collected from a nationally representative cohort of 1 000 000 health service users in Taiwan. Participants responding well to antidepressants were compared with those showing poor responses to adequate trials of antidepressants. Results: In 7.6-12.1% of those with a diagnosis of unipolar major depressive disorder this diagnosis was subsequently changed to bipolar disorder, with a mean time to change of 1.89-2.98 years. Difficult-to-treat participants presented higher rates of change to a bipolar diagnosis (25.6% in cohort 2000; 26.6% in cohort 2003) than easy-to-treat participants (8.8-8.9% in cohort 2000; 6.8-8.6% in cohort 2003; P<0.0001). Regression analysis showed that the variable most strongly associated with the change in diagnosis was antidepressant use history. The difficult-to-treat participants were associated most with diagnostic changing (cohort 2000: odds ratio (OR) = 1.88 (95% CI 1.12-3.16); cohort 2003: OR = 4.94 (95% CI 2.81-8.68)). Conclusions: This is the first large-scale study to report an association between antidepressant response history and subsequent change in diagnosis from major depressive disorder to bipolar disorder. Our findings support the view that a history of poor response to antidepressants in unipolar depression could be a useful predictor for bipolar diathesis.

Loo, C. K., A. Alonzo, et al. (2012). "Transcranial direct current stimulation for depression: 3-week, randomised, sham-controlled trial." The British Journal of Psychiatry **200**(1): 52-59. http://bjp.rcpsych.org/content/200/1/52.abstract.

Background: Preliminary evidence suggests transcranial direct current stimulation (tDCS) has antidepressant efficacy. Aims: To further investigate the efficacy of tDCS in a double-blind, sham-controlled trial (registered at www.clinicaltrials.gov: NCT00763230). Method: Sixty-four participants with current depression received active or sham anodal tDCS to the left prefrontal cortex (2 mA, 15 sessions over 3 weeks), followed by a 3-week open-label active treatment phase. Mood and neuropsychological effects were assessed. Results: There was significantly greater improvement in mood after active than after sham treatment (P<0.05), although no difference in responder rates (13% in both groups). Attention and working memory improved after a single session of active but not sham tDCS (P<0.05). There was no decline in neuropsychological functioning after 3-6 weeks of active stimulation. One participant with bipolar disorder became hypomanic after active tDCS. Conclusions: Findings confirm earlier reports of the antidepressant efficacy and safety of tDCS. Vigilance for mood switching is advised when administering tDCS to individuals with bipolar disorder.

MacCoon, D. G., Z. E. Imel, et al. (2012). "The validation of an active control intervention for Mindfulness Based Stress Reduction (MBSR)." Behaviour Research and Therapy **50**(1): 3-12. http://www.sciencedirect.com/science/article/pii/S0005796711002476.

(Available as free full text): Most of the extant literature investigating the health effects of mindfulness interventions relies on wait-list control comparisons. The current article specifies and validates an active control condition, the Health Enhancement Program (HEP), thus providing the foundation necessary for rigorous investigations of the relative efficacy of Mindfulness Based Stress Reduction (MBSR) and for testing mindfulness as an active ingredient. 63 participants were randomized to either MBSR (n = 31) or HEP (n = 32). Compared to HEP, MBSR led to reductions in thermal pain ratings in the mindfulness- but not the HEP-related instruction condition (η2 = .18). There were significant improvements over time for general distress (η2 = .09), anxiety (η2 = .08), hostility (η2 = .07), and medical symptoms (η2 = .14), but no effects of intervention. Practice was not related to change. HEP is an active control condition for MBSR while remaining inert to mindfulness. These claims are supported by results from a pain task. Participant-reported outcomes (PROs) replicate previous improvements to well-being in MBSR, but indicate that MBSR is no more effective than a rigorous active control in improving these indices. These results emphasize the importance of using an active control condition like HEP in studies evaluating the effectiveness of MBSR.

Miller, L., P. Wickramaratne, et al. (2012). "Religiosity and major depression in adults at high risk: a ten-year prospective study." Am J Psychiatry **169**(1): 89-94. http://www.ncbi.nlm.nih.gov/pubmed/21865527.

OBJECTIVE: Previously the authors found that personal importance of religion or spirituality was associated with a lower risk for major depression in a study of adults with and without a history of depression. Here the authors examine the association of personal importance of religion or spirituality with major depression in the adult offspring of the original sample using a 10-year prospective longitudinal design. METHOD: Participants were 114 adult offspring of depressed and nondepressed parents,

followed longitudinally. The analysis covers the period from the 10-year to the 20-year follow-up assessments. Diagnosis was assessed with the Schedule for Affective Disorders and Schizophrenia-Lifetime Version. Religiosity measures included personal importance of religion or spirituality, frequency of attendance at religious services, and denomination (all participants were Catholic or Protestant). In a logistic regression analysis, major depression at 20 years was used as the outcome measure and the three religiosity variables at 10 years as predictors. RESULTS: Offspring who reported at year 10 that religion or spirituality was highly important to them had about one-fourth the risk of experiencing major depression between years 10 and 20 compared with other participants. Religious attendance and denomination did not significantly predict this outcome. The effect was most pronounced among offspring at high risk for depression by virtue of having a depressed parent; in this group, those who reported a high importance of religion or spirituality had about one-tenth the risk of experiencing major depression between years 10 and 20 compared with those who did not. The protective effect was found primarily against recurrence rather than onset of depression. CONCLUSIONS: A high self-report rating of the importance of religion or spirituality may have a protective effect against recurrence of depression, particularly in adults with a history of parental depression.

Myhrene Steffenak, A. K., G. Nordström, et al. "Mental Distress and Subsequent Use of Psychotropic Drugs Among Adolescents - A Prospective Register Linkage Study." Journal of Adolescent Health(0). http://www.sciencedirect.com/science/article/pii/S1054139X11003557.

Purpose To investigate the association between mental distress, other factors, and subsequent use of psychotropic drugs in adolescents aged 15–16 years. Methods This study is based on information retrieved from the Norwegian Youth Health Surveys (2000–2003) and linked to prescription data from the Norwegian Prescription Database (2004–2009). The study population included 11,620 adolescents aged 15–16 (87% response rate) years. Self-reported mental distress (Hopkins Symptom Checklist-10 score 1.85) was recorded along with health and lifestyle habits, education plans, and family economics. Incident psychotropic drug use (outcome measure) was defined ≥1 prescriptions of one of the following psychotropic drugs: anxiolytics, hypnotics, antidepressants, or phenothiazines registered in the Norwegian Prescription Database. Results Overall, 15.5% of the adolescents reported mental distress, 75% of them were girls. For both genders, incident psychotropic use was significantly higher among those reporting mental distresses at baseline, compared with the rest of the participants. The highest psychotropic drug use was observed among mentally distressed girls (27.7%). Mental distress was significantly associated with incident use of psychotropic drugs (odds ratio: 2.25, 95% confidence interval: 1.97–2.55). After adjustment for confounding factors and inclusion of potential mediating factors, the odds ratio attenuated to 1.59 (95% confidence interval: 1.35–1.86). Conclusions The prevalence of mental distress among adolescents may have consequences for health promotion. Public health nurses in Norway, working in health centers and schools, have a responsibility to promote health and prevent health problems. They have the opportunity and a responsibility to identify vulnerable young people. *Medical Xpress - http://medicalxpress.com/news/2012-01-girls-mental-distress-psychiatric-drugs.html - comments "More than 15 percent of Norwegian teenagers ages 15 to 16 reported "mental distress," or symptoms of depression and anxiety, with significantly more girls reporting distress than boys, according to a new study in the Journal of Adolescent Health. Girls with mental distress were also more likely than their male counterparts to be prescribed psychotropic drugs—those that alter chemical levels in the brain, affecting behavior and mood. One in five girls reported mental distress, a rate three times higher than reported by boys. Girls also had the highest prescription rates for subsequent psychotropic drugs. More than a quarter of mentally distressed girls ages 15 to 16 registered as a new psychotropic drug user before they reached the age of 25. The study analyzed data from almost 12,000 adolescents participating in the Norwegian Health Surveys of 2000 – 2003. Study participants self-reported mental distress, health and lifestyle habits, future education plans and family economics. Researchers linked data from all of the participants to the Norwegian Prescription Database (NorPD) of 2004 – 2009. Norwegian pharmacies must legally report electronic prescription data for all individuals living outside institutions. The availability of information about adolescents and prescription drug use is limited, said the authors. "The database offers a unique possibility to share information on these study issues and other future studies," said lead study author Anne Kjersti Myhrene Steffenak, M.C.C., of Hedmark University College in Elverum, Norway. "Norway has a wonderful advantage in that they have nationwide health registries, which can help to give them a good idea of what is occurring in health care delivery and outcomes," said Leslie R. Walker, M.D., president of the Society of Adolescent Health and Medicine and Chief of the Division of Adolescent Medicine at University of Washington Seattle Children's Hospital. Norwegian teens with mental distress also reported poorer health, with 94 percent of the girls reporting pain in at least one location on their bodies, a higher consumption of alcohol and daily smoking, less physical activity, plans for vocational careers and lower family income. Steffenak found the notable gender differences in the initiation of drug treatment most intriguing and asked, "Are they due to the way we behave as parents, as a society, or are these biological differences? After accounting for gender differences in mental distress, girls are still more likely to initiate psychotropic drug use than boys." Dr. Walker noted that girls receive more medications in general than boys. "This could be due to female reproductive concerns yielding more medical visits and more opportunities to disclose other medical concerns that were not the primary complaint," Walker postulated. The United States prescribes more psychotropic drugs in adolescence than any other country, she said. "Does this mean we are missing opportunities to identify these youth at risk and intervene before there is a need for prescription treatment? It remains to be studied."*

Ohayon, M. M., Y. Dauvilliers, et al. (2012). "Operational Definitions and Algorithms for Excessive Sleepiness in the General Population: Implications for DSM-5 Nosology." Arch Gen Psychiatry **69**(1): 71-79. http://archpsyc.ama-assn.org/cgi/content/abstract/69/1/71.

Context Excessive sleepiness (ES) is poorly defined in epidemiologic studies, although its adverse implications for safety, health, and optimal social and vocational functioning have been extensively reported. Objective To determine the importance of ES definition, measurement, and prevalence in the general population, together with its coexisting conditions. Design Cross-sectional telephone study. Participants A total of 15 929 individuals representative of the adult general population of 15 states in the United States. Main Outcome Measures Interviews were carried out using Sleep-EVAL, a knowledge-based expert system for use in epidemiologic studies, focusing on sleep, as well as physical and mental disorders, according to classification in DSM-IV and the second edition of the International Classification of Sleep Disorders. The interviews elicited information on ES, naps, frequency, duration, impairment, and distress associated with ES symptoms. Results Excessive sleepiness was reported by 27.8% (95% CI, 27.1%-28.5%) of the sample. Excessive sleepiness with associated symptoms was found in 15.6% of the participants (95% CI, 15.0%-16.2%). Adding an ES frequency of at least 3 times per week for at least 3 months despite normal sleep duration dropped the prevalence to 4.7% of the sample (95% CI, 4.4%-5.0%). The proportion of individuals having social or professional impairment and psychological distress increased with the frequency of ES symptoms during the week and within the same day. In multivariate models, the number of ES episodes per day and severity of ES were identified as the best predictors for impairment/distress. Prevalence of hypersomnia disorder was 1.5% of the participants (95% CI, 1.3%-1.7%). The most common coexisting conditions were mood and substance use disorders. Conclusions Excessive sleepiness is an important problem in the US population, even when using restrictive criteria to define it. Hypersomnia disorder is more prevalent than previously estimated. Excessive sleepiness has to be recognized and given attention by public health authorities, scientists, and clinicians.

Seritan, A., J. Hunt, et al. (2012). "The State of Medical Student Wellness: A Call for Culture Change." Academic Psychiatry **36**(1): 7-10. http://dx.doi.org/10.1176/appi.ap.10030042.

(Free full text): In recent years, multiple studies exploring medical student mental health highlight the increased frequency and severity of emotional problems during physicians' formative years. Although these studies demonstrate a clear burden on medical students, we have not achieved a broader understanding of malleable factors in student wellness, and, thus, effective interventions to promote wellness are lagging behind. The development of evidence-based preventive and clinical programs in academic centers requires an appropriate focus on overall medical student wellness, encompassing academic and institutional elements. Successful models of student wellness programs exist (+1); however, best-practices in this area have not yet been developed. A systematic review of studies among U.S. and Canadian medical students showed a higher prevalence of anxiety and depression among these students than in their age-matched peers (+2). Even more worrisome, 11% of students in a longitudinal cohort from seven medical schools admitted to having had suicidal thoughts in the previous year (+3). Over time, medical student health centers have seen an increased utilization of services (+4, +5). It is unclear whether this is due to a higher prevalence and/or severity of mental disorders, increased identification of disorders, improved availability of services, reduced stigma, or a combination of these factors. This commentary will review factors that may contribute to student distress and discuss suggestions for effective interventions to address these. Our purpose is to provoke thought and debate about student wellness and to inspire action through the development of evidence-based interventions to improve wellness at medical schools across the country.

Siegenthaler, E., T. Munder, et al. (2012). "Effect of Preventive Interventions in Mentally Ill Parents on the Mental Health of the Offspring: Systematic Review and Meta-Analysis." Journal of the American Academy of Child and Adolescent Psychiatry **51**(1): 8-17.e18. http://linkinghub.elsevier.com/retrieve/pii/S0890856711009932?showall=true.

Mental illness in parents affects the mental health of their children. A systematic review and a meta-analysis of the effectiveness of interventions to prevent mental disorders or psychological symptoms in the offspring were performed. The Cochrane, MEDLINE, EMBASE, and PsycINFO databases were searched for randomized controlled trials of interventions in parents with mental disorders. Outcomes in the child included incident mental disorders of the same nature and internalizing (negative emotions, depressive symptoms, anxiety) or externalizing (hyperactivity, aggressiveness, behavioral problems) symptoms. Relative risks and standardized mean differences in symptom scores were combined in random-effects meta-analysis. Thirteen trials including 1,490 children were analyzed. Interventions included cognitive, behavioral, or psychoeducational components. Seven trials assessed the incidence of mental disorders and seven trials assessed symptoms. In total 161 new diagnoses of mental illness were recorded, with interventions decreasing the risk by 40% (combined relative risk 0.60, 95% CI 0.45–0.79). Symptom scores were lower in the intervention groups: standardized mean differences were −0.22 (95% CI −0.37 to −0.08) for internalizing symptoms (p = .003) and −0.16 (95% confidence interval −0.36 to 0.04) for externalizing symptoms (p = .12). Interventions to prevent mental disorders and psychological symptoms in the offspring of parents with mental disorders appear to be effective.

Simms, L. J., J. J. Prisciandaro, et al. (2012). "The structure of depression, anxiety and somatic symptoms in primary care." Psychological Medicine **42**(01): 15-28. http://dx.doi.org/10.1017/S0033291711000985.

Background: Observed co-morbidity among the mood and anxiety disorders has led to the development of increasingly sophisticated dimensional models to represent the common and unique features of these disorders. Patients often present to primary care settings with a complex mixture of anxiety, depression and somatic symptoms. However, relatively little is known about how somatic symptoms fit into existing dimensional models. Method: We examined the structure of 91 anxiety, depression and somatic symptoms in a sample of 5433 primary care patients drawn from 14 countries. One-, two- and three-factor lower-order models were considered; higher-order and hierarchical variants were studied for the best-fitting lower-order model. Results: A hierarchical, bifactor model with all symptoms loading simultaneously on a general factor, along with one of three specific anxiety, depression and somatic factors, was the best-fitting model. The general factor accounted for the bulk of symptom variance and was associated with psychosocial dysfunction. Specific depression and somatic symptom factors accounted for meaningful incremental variance in diagnosis and dysfunction, whereas anxiety variance was associated primarily with the general factor. Conclusions: The results (a) are consistent with previous studies showing the presence and importance of a broad internalizing or distress factor linking diverse emotional disorders, and (b) extend the bounds of internalizing to include somatic complaints with non-physical etiologies.

Thoma, N. C., D. McKay, et al. (2012). "A quality-based review of randomized controlled trials of cognitive-behavioral therapy for depression: an assessment and metaregression." Am J Psychiatry **169**(1): 22-30. http://www.ncbi.nlm.nih.gov/pubmed/22193528.

OBJECTIVE: The authors assessed the methodological quality of randomized controlled trials of cognitive-behavioral therapy (CBT) for depression using the Randomized Controlled Trial Psychotherapy Quality Rating Scale (RCT-PQRS). They then compared the quality of CBT trials with that of psychodynamic therapy trials, predicting that CBT trials would have higher quality. The authors also sought to examine the relationship between quality and outcome in the CBT trials. METHOD: An independent-samples t test was used to compare CBT and psychodynamic therapy trials for average total quality score. Metaregression was used to examine the relationship between quality score and effect size in the CBT trials. RESULTS: A total of 120 trials of CBT for depression met inclusion criteria. Their mean total quality score on the RCT-PQRS was 25.7 (SD=8.90), which falls into the lower range of adequate quality. In contrast to our prediction, no significant difference was observed in overall quality between CBT and psychodynamic therapy trials. Lower quality was related to both larger effect sizes and greater variability of effect sizes when analyzed across all available comparisons to CBT. CONCLUSIONS: On average, randomized controlled trials of CBT and of psychodynamic therapy did not differ significantly in quality. In CBT trials, low quality appeared to reduce the reliability and validity of trial results. These findings highlight the importance of discerning quality in individual psychotherapy trials and also point toward specific methodological standards for the future.

Whittaker, R., S. Merry, et al. (2012). "MEMO - A Mobile Phone Depression Prevention Intervention for Adolescents: Development Process and Postprogram Findings on Acceptability From a Randomized Controlled Trial." J Med Internet Res **14**(1): e13. http://www.ncbi.nlm.nih.gov/pubmed/22278284.

BACKGROUND: Prevention of the onset of depression in adolescence may prevent social dysfunction, teenage pregnancy, substance abuse, suicide, and mental health conditions in adulthood. New technologies allow delivery of prevention programs scalable to large and disparate populations. OBJECTIVE: To develop and test the novel mobile phone delivery of a depression prevention intervention for adolescents. We describe the development of the intervention and the results of participants' self-reported satisfaction with the intervention. METHODS: The intervention was developed from 15 key messages derived from cognitive behavioral therapy (CBT). The program was fully automated and delivered in 2 mobile phone messages/day for 9 weeks, with a mixture of text, video, and cartoon messages and a mobile website. Delivery modalities were

guided by social cognitive theory and marketing principles. The intervention was compared with an attention control program of the same number and types of messages on different topics. A double-blind randomized controlled trial was undertaken in high schools in Auckland, New Zealand, from June 2009 to April 2011. RESULTS: A total of 1348 students (13-17 years of age) volunteered to participate at group sessions in schools, and 855 were eventually randomly assigned to groups. Of these, 835 (97.7%) self-completed follow-up questionnaires at postprogram interviews on satisfaction, perceived usefulness, and adherence to the intervention. Over three-quarters of participants viewed at least half of the messages and 90.7% (379/418) in the intervention group reported they would refer the program to a friend. Intervention group participants said the intervention helped them to be more positive (279/418, 66.7%) and to get rid of negative thoughts (210/418, 50.2%)-significantly higher than proportions in the control group. CONCLUSIONS: Key messages from CBT can be delivered by mobile phone, and young people report that these are helpful. Change in clinician-rated depression symptom scores from baseline to 12 months, yet to be completed, will provide evidence on the effectiveness of the intervention. If proven effective, this form of delivery may be useful in many countries lacking widespread mental health services but with extensive mobile phone coverage. (Archived by WebCite at http://www.webcitation.org/64aueRqOb).

Zisook, S., N. Downs, et al. (2012). "College Students and Suicide Risk: Prevention and the Role of Academic Psychiatry." Academic Psychiatry **36**(1): 1-6. http://dx.doi.org/10.1176/appi.ap.10110155.

(Free full text): An 18-year-old freshman college student, "A.B.," was handsome, athletic, and artistically gifted. A.B. seemed to have everything going for him. Yet, he actually had few close friends, had always seemed a bit aloof, and was considered a "worry-wart." He had a brief period of psychotherapy for depression and social anxiety when he was in junior high school. He had otherwise never been treated for depression and was in good physical health. His maternal grandmother had died by suicide, and his mother had chronic and recurrent depression. At school, A.B. often felt isolated and alone. During their weekly phone calls, he told his parents how lonely and unhappy he felt; he listened to them when they encouraged him to "push on." After barely passing his first mid-term examination, he became preoccupied with failing, worried incessantly, and felt increasingly overwhelmed by the demands of studying for other examinations while attempting to keep up with daily work. To increase his concentration and energy, he began experimenting with stimulants during the day, which was soon followed by alcohol at night to help him relax and fall sleep. At his mother's urging, he visited the student counseling center. He made it clear that he did not want medications, and his therapist complied by not requiring a psychiatric assessment. Still, he did not feel comfortable with his therapist, failed to show up for his third appointment, and never called to reschedule. During a 10-day holiday break, A.B. returned home and almost immediately began to feel less depressed, anxious, and withdrawn. His parents were heartened to hear of his enthusiasm to return to school and to switch from a premedical to an art history major. One week after returning to school, he was found dead from hanging in his dormitory room. The case vignette above is not an actual case, but is an amalgam of several tragic instances of college students who have died by suicide. It illustrates several points about suicide among college students, including risk factors and missed opportunities for prevention. Drawing upon A.B.'s history, course of illness, and outcome, this commentary will discuss college student suicide in terms of epidemiologic risk factors and the roles of academic psychiatry and psychiatric intervention in preventing suicide. A.B. is not alone. The estimated global burden of suicide is one million deaths per year (+1), making suicide the tenth-leading cause of death worldwide. Tragically, in the United States, suicide is the third-leading cause of death among college-age individuals and may even surpass homicide as the second-leading cause of death on college campuses (+2, +3). In a national survey of over 20,000 college students, on 39 campuses, over 10% had seriously considered attempting suicide; 8% had made a plan; and almost 2% had actually attempted suicide in the previous year (+4). Another recent survey of over 1,000 college students at a large mid-Atlantic university reported that 12% of students had pondered killing themselves at least once, 25% of whom said they thought about it repeatedly; 1% had made specific plans or carried out full-fledged attempts (+5). Why are the rates of suicidal thoughts and behaviors so high among college students? "College and the transition to adulthood are a time of infinite possibilities; but, for students struggling with unaddressed mental health problems, those possibilities fade" (+6). As during other phases of life, mental illness, particularly un- or undertreated mood disorders, are the most robust risk factors. Major depression affects individuals of all ages, ethnicities, and socioeconomic groups, and the age at onset of depression most often is during adolescence and early adulthood (+7, +8). When depression occurs early in life, it is a particularly virulent disease associated with even higher rates of suicidal thoughts and behaviors throughout life than later-onset depression (+8).

Zubkoff, L., Y. Young-Xu, et al. (2012). "Usefulness of symptom feedback to providers in an integrated primary care--mental health care clinic." Psychiatr Serv **63**(1): 91-93. http://www.ncbi.nlm.nih.gov/pubmed/22227767.

OBJECTIVE: Measurement-based care has been endorsed but not embraced in mental health settings. There is currently little guidance regarding the best methods to implement measurement-based care. METHODS: A survey of mental health providers was conducted before (N=15) and after (N=17) the implementation of a patient self-report symptom measurement system. RESULTS: At baseline, respondents rarely used the patient self-assessment information (mean+/-SD=1.8+/-1.8); they reported the patient data to be marginally useful (4.1+/-1.9), and only slightly recommended the use of patient assessments (4.3+/-2.0). Possible scores ranged from 1 to 7, with higher scores indicating more positivity. At follow-up, respondents almost always used the information in the assessments (6.3+/-1.7), found the patient report data very useful (6.4+/-.8), and highly recommended continued use of patient surveys in the integrated clinic (6.6+/-.5). CONCLUSIONS: Providers' lack of enthusiasm about integration of routine data collection and reporting of patient symptoms may be overcome by simply exposing providers to this process.