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DoDSER - Department of Defense Suicide Event Report (CY 2014)

National Center for Telehealth and Technology (T2)
Defense Centers of Excellence for Psychological Health & Traumatic Brain Injury

From DoD press release:

In 2014, there were 269 deaths by suicide among active component service members (compared to 259 deaths by suicide in 2013). There were 169 deaths by suicide among the selected reserve component in 2014, 80 in the reserve and 89 in the National Guard (compared to 220 deaths by suicide in 2013).

The suicide rate per 100,000 in 2014 was 19.9 for active component service members, 21.9 for the reserve, and 19.4 for National Guard.


Behavioral Health Barometer, 2015

Substance Abuse and Mental Health Services Administration
Publication Date: 2/2016

Presents data about key aspects of substance use and mental health care issues, including rates of serious mental illness, suicidal thoughts, substance use, underage drinking, and the percentages of those who seek treatment for these disorders.
Meta-Analysis of the Efficacy and Safety of Prazosin versus Placebo for the Treatment of Nightmares and Sleep Disturbances in Adults with Post-Traumatic Stress Disorder.

Kirsten C. George, Lisa Kebejian, Leigh J. Ruth, Christopher W.T. Miller, Seth Himelhoch

Journal of Trauma & Dissociation
Accepted author version posted online: 02 Feb 2016
DOI:10.1080/15299732.2016.1141150

Context:
Although sleep disturbances occur commonly in patients with post-traumatic stress disorder (PTSD) and are associated with adverse outcomes and increased suicidality, they are often inadequately addressed by antidepressant medications.

Objective:
This review aims to assess whether prazosin reduces nightmares, sleep disturbances, and illness severity in adults with PTSD.

Methods:
Electronic databases (PubMed, PsycINFO) were searched in September 2014 for randomized controlled trials (RCT) in adults. Search terms included “post-traumatic stress disorder” (PTSD), “prazosin,” “nightmares,” and “sleep disturbance.” Included studies used prazosin and provided objective outcome data related to nightmares and/or sleep quality.

Results:
Six studies (191 participants) met criteria for inclusion. Prazosin was more effective than placebo in improving nightmares (SMD of 1.022, 95% CI 0.41, 1.62, p = 0.001), sleep quality (SMD of 0.93, 95% CI −0.02, 1.88, p = 0.054 and SMD of 1.14, 95% CI of 0.24, 2.03, p = 0.01), and illness severity (SMD of 1.20, 95% CI 0.79, 1.61, p = < 0.001) with no significant effect on systolic (SMD of −0.01, 95% CI −0.40, 0.37, p = 0.94) or diastolic blood pressure (SMD of 0.30, 95% CI −0.09, 0.68, p = 0.154).

Conclusion:
PTSD-related nightmares, sleep disturbances and overall illness severity showed a significant response to treatment with prazosin. With careful dose titration, prazosin was well tolerated and had no significant sustained effect on blood pressure.

The Effects of Transdiagnostic Group CBT for Anxiety on Insomnia Symptoms.
Insomnia is a common feature among individuals with anxiety disorders. Studies of cognitive behavioral therapy (CBT) for anxiety report moderate effects on concomitant insomnia symptoms, but further research is still needed especially toward understanding how CBT for anxiety renders beneficial effects on insomnia. The current study examined changes in insomnia symptoms reported by 51 Veterans who participated in a group-based transdiagnostic CBT for anxiety intervention. In addition, insomnia symptoms were examined in relation to symptoms of general distress (GD), anhedonic depression (AD), and anxious arousal (AA) pre-to post-treatment. Results revealed a small, though statistically significant ($p < .05$) beneficial effect on insomnia symptoms. When changes in GD, AD, and AA were simultaneously examined in relation to changes in insomnia, change in AA was the only significant predictor of insomnia symptoms. The current study highlights the role of AA in the relationship between anxiety disorders and insomnia and demonstrates that reductions in insomnia during transdiagnostic CBT for anxiety can be largely attributed to changes in AA.


Suicide Risk Documented During Veterans' Last Veterans Affairs Health Care Contacts Prior to Suicide.


Suicide and Life-Threatening Behavior
Article first published online: 1 FEB 2016
DOI: 10.1111/sltb.12226

A total of 295 veterans who died by suicide in 2009 across 11 states and received Veterans Affairs (VA) health care in the 6 months prior to death were identified. The suicide risk factors documented and the care received at these veterans' last VA contacts are described, and the study explores whether veterans present differently to VA care (i.e., different risk factors documented or different care settings accessed) based on the proximity of their last contact to suicide. Many veterans were seen in primary care ($n = 136; 46\%$) for routine follow-up ($n = 168; 57\%$). Fifty-three (18\%) were assessed for suicidal thoughts; 20 (38\%) of whom endorsed such thoughts. Although higher frequencies of some risk factors at last contacts more proximal to
suicide compared to those more distal were observed, findings overall highlight the challenges clinicians face detecting enhanced risk prior to suicide.

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Determinants of National Guard Mental Health Service Utilization in VA versus Non-VA Settings.


Health Services Research
Article first published online: 3 FEB 2016
DOI: 10.1111/1475-6773.12446

Objective
To determine associations between need, enabling, and predisposing factors with mental health service use among National Guard soldiers in the first year following a combat deployment to Iraq or Afghanistan.

Data Sources/Study Setting
Primary data were collected between 2011 and 2013 from 1,426 Guard soldiers representing 36 units.

Study Design
Associations between Guard soldier factors and any mental health service use were assessed using multivariable logistic regression models in a cross-sectional study. Further analysis among service users (N = 405) assessed VA treatment versus treatment in other settings.

Principal Findings
Fifty-six percent of Guard soldiers meeting cutoffs on symptom scales received mental health services with 81 percent of those reporting care from the VA. Mental health service use was associated with need (mental health screens and physical health) and residing in micropolitan communities. Among service users, predisposing factors (middle age range and female gender) and enabling factors (employment, income above $50,000, and private insurance) were associated with greater non-VA services use.

Conclusion
Overall service use was strongly associated with need, whereas sector of use (non-VA vs. VA) was insignificantly associated with need but strongly associated with enabling factors. These findings have implications for the recent extension of veteran health coverage to non-VA providers.
The Marriage Checkup: Adapting and Implementing a Brief Relationship Intervention for Military Couples.

Jeffrey A. Cigrang, James V. Cordova, Tatiana D. Gray, Matt Hawrilenko, Elizabeth Najera, Crystal Pinkley, Matthew Nielsen, JoLyn Tatum, Kristen Redd

Cognitive and Behavioral Practice
Available online 4 February 2016
doi:10.1016/j.cbpra.2016.01.002

Given the significant negative impact of relationship distress on the health and well being of members of the military, preventative and accessible care is needed in order to provide crucial relationship support to service members and their families. This paper presents the rationale, key considerations, and feasibility for adapting the Marriage Checkup (MC), a brief intervention for enhancing marital resiliency, for use by internal behavioral health consultants (IBHCs) working in an integrated primary care clinic serving an active duty military population. We detail the adapted MC protocol, which was revised to contain military-centric content and fit into the fast-paced environment of primary care (e.g., streamlined to fit within three 30-minute appointments). IBHCs working in primary care were trained to offer the intervention at two air force bases. Twenty couples and 1 individual have completed the MC and a 1-month follow-up assessment. The MC intervention appeared to be well-received by both couples and IBHCs. In this paper, we provide specific guidance for clinicians and providers who are interested in integrating the Marriage Checkup into their practice.

Medical and Welfare Officers beliefs about post-deployment screening for mental health disorders in the UK Armed Forces: a qualitative study.


BACKGROUND:
This study aimed to examine currently serving United Kingdom (UK) military Medical and Welfare Officers views on the potential introduction of post-deployment screening for mental ill health.
METHODS:
Semi-structured interviews were conducted with 21 Medical and Welfare Officers. Interview transcripts were analysed using data-driven thematic analysis.

RESULTS:
Four themes were identified: positive views of screening; reliability of responses; impact on workload; and suggestions for implementation. Interviewees viewed the introduction of screening post-deployment as likely to increase awareness of mental health problems whilst also reporting that service personnel were likely to conceal their true mental health status by providing misleading responses to any screening tool. Concern over reliability of responses may provide one explanation for the reluctance of service personnel to seek help for problems, as they could feel they will not be taken seriously. Welfare Officers felt they would not have the knowledge or experience to respond to help-seeking. Although participants were concerned about potential impact on their personal workload, they indicated a desire to positively engage with the screening programme if research showed it was an effective tool to improve mental health care.

CONCLUSIONS:
Welfare and healthcare providers are well disposed towards a screening programme for mental health but highlight a few concerns in its implementation. In particular Welfare Officers appear to require more training in how to respond to mental ill health. Concerns about available funding and resources to respond to increased workload will need to be addressed should post-deployment screening for mental health be introduced in the UK military.

http://psycnet.apa.org/journals/pro/47/1/84/

Working with veterans and military families: An assessment of professional competencies.

Leppma, Monica; Taylor, Jennifer M.; Spero, Rachel A.; Leonard, Jessica M.; Foster, Melissa N.; Daniels, Jeffrey A.

Professional Psychology: Research and Practice
Vol 47(1), Feb 2016, 84-92
http://dx.doi.org/10.1037/pro0000059

Despite decades of articles urging for greater attention to professional competence in the field of psychology, few empirical studies have examined what it means to be a competent mental health professional. The purpose of the present study was to explore critical domains of professional competence for mental health professionals who work with veterans and their families. Using a mixed-method Delphi approach, a panel of experts identified 25 professional
competencies for providers of services to veterans and their families. Implications for competent professional practice, extensions for research, and applications for graduate training programs that wish to specialize in training students to work with veterans are discussed. (PsycINFO Database Record (c) 2016 APA, all rights reserved)


The Importance of Military Cultural Competence.

Meyer EG, Writer BW, Brim W4

Military cultural competence has recently gained national attention. Experts have posited that limited outcomes in the treatment of posttraumatic stress disorder and depression in the military may be related to limited familiarity with the military. National surveys have indicated low military cultural competence among providers and limited educational efforts on military culture or pertinent military pathology in medical schools and residency training programs. Military families, with their own unique military cultural identity, have been identified as a population with increased risks associated with deployment. In response to these findings, several curricula regarding military culture have been established and widely distributed. Assessments of military cultural competence have also been developed. The clinical impact of enhanced cultural competence in general has thus far been limited. The military, however, with its highly prescribed cultural identity, may be a model culture for further study.

http://sw.oxfordjournals.org/content/61/1/83.short

Military Culture and the Transition to Civilian Life: Suicide Risk and Other Considerations.

Pease, J. L., Billera, M., & Gerard, G.

Social Work, 61(1), 83-86
doi: 10.1093/sw/swv050

Suicide among active duty military members and veterans has increased in the wake of the two international conflicts (RAND National Security Research Division, 2011), surpassing those of the general population for the first time since Vietnam. Recent research has identified the period of separation from the military as a period of elevated risk, regardless of deployment history (Reger et al, 2015). Although the association between suicide and deployment is not
clear-cut, studies have shown that the transition to civilian life for OEF/OIF veterans who have served in combat can be particularly difficult, with over 50 percent describing the readjustment to civilian life as a “real struggle” (Morin, 2011a).

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**Qualitative Examination of Cognitive Change during PTSD Treatment for Active Duty Service Members.**

Katherine A. Dondanville, Abby E. Blankenship, Alma Molino, Patricia A. Resick, Jennifer Schuster Wachen, Jim Mintz, Jeffrey S. Yarvis, Brett T. Litz, Elisa V. Borah, John D. Roache, Stacey Young-McCaughan, Elizabeth A. Hembree, Alan L. Peterson

Behaviour Research and Therapy
Available online 4 February 2016
doi:10.1016/j.brat.2016.01.003

The current study investigated changes in service members’ cognitions over the course of Cognitive Processing Therapy (CPT) for posttraumatic stress disorder (PTSD). Sixty-three active duty service members with PTSD were drawn from 2 randomized controlled trials of CPT-Cognitive Only (CPT-C). Participants wrote an impact statement about the meaning of their index trauma at the beginning and again at the end of therapy. Clauses from each impact statement were qualitatively coded into three categories for analysis: assimilation, accommodation, and overaccommodation. The PTSD Checklist, Posttraumatic Symptom Scale-Interview Version, and the Beck Depression Inventory-II were administered at baseline and posttreatment. Repeated measures analyses documented a significant decrease in the percentage of assimilated or overaccommodated statements and an increase in the percentage of accommodated statements from the beginning to the end of treatment. Changes in accommodated statements over the course of treatment were negatively associated with PTSD and depression symptom severity, while statements indicative of overaccommodation were positively associated with both PTSD and depression symptom severity. Treatment responders had fewer overaccommodated and more accommodated statements. Findings suggest that CPT-C changes cognitions over the course of treatment. Methodological limitations and the lack of association between assimilation and PTSD symptom severity are further discussed.

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**Incidence of and Risk for Posttraumatic Stress Disorder and Depression in a Representative Sample of U.S. Reserve and National Guard.**
Purpose
We aim to determine the incidence rates (IR) of first ever PTSD and depression in a population-based cohort of US Reserve and National Guard service members.

Methods
We used data from the US Reserve and National Guard Study (N = 2003) to annually investigate incident and recurrent PTSD and depression symptoms from 2010 to 2013. We estimated the IR and recurrence rate over 4 years and according to several sociodemographic and military characteristics.

Results
From 2010 to 2013, incidence rates were 4.7 per 100 person-years for both PTSD and depression symptoms using the sensitive criteria, 2.9 per 100 person-years using the more specific criteria, recurrence rates for both PTSD and depression were more than 4 times as high as IRs, and IRs were higher among those with past-year civilian trauma, but not past-year deployment.

Conclusions
The finding that civilian trauma, but not past-year military deployment, is associated with an increased risk of PTSD and depression incidence suggest that RNG psychopathology could be driven by other, non-military, traumatic experiences.

http://gradworks.umi.com/37/45/3745534.html

From combat to classroom: An examination of combat trauma's effects on military veterans' relationships and adjustment to college.

Boul, Steven J., Ph.D.

Dissertation
University of North Carolina at Greensboro, 2015

The purpose of this study was to test a model of veterans’ college adjustment that demonstrated how combat exposure can lead to psychological distress and a lack of empathy and trust, how those variables interact and affect social support and classroom interactions, and how all the
variables effect college adjustment self-efficacy. The study quantified the prevalence of PTSD, anxiety, depression, and stress in the student veteran population, finding that rates were lower than in a previous study on student veterans and on par with the active duty military. Although the proposed SEM model did not fit the data, subsequent stepwise regressions found that combat exposure was significantly inversely associated with trust and empathy, and directly correlated with psychological distress. Psychological distress was found to inversely affect trust, empathy, social support, alienation in the classroom, and feeling connected to other students and faculty. Trust and empathy scores were found to affect social support, and combat exposure and psychological distress were found to affect social support through their influence on trust and empathy. Social support was found to have the largest influence on college self-efficacy adjustment scores. In addition, the study found that gender affected the outcomes of the model. Implications of these results were discussed, along with limitations to the study and possible future research.

http://cjp.sagepub.com/content/27/2/203.short

U.S. Department of Veterans Affairs Veterans Justice Outreach Program: Connecting Justice-Involved Veterans With Mental Health and Substance Use Disorder Treatment.

Andrea K. Finlay, David Smelson, Leon Sawh, Jim McGuire, Joel Rosenthal, Jessica Blue-Howells, Christine Timko, Ingrid Binswanger, Susan M. Frayne, Janet C. Blodgett, Tom Bowe, Sean C. Clark, and Alex H. S. Harris

Criminal Justice Policy Review
March 2016 27: 203-222
doi:10.1177/0887403414562601

The Veterans Justice Outreach (VJO) program of the U.S. Veterans Health Administration has a primary mission of linking military veterans in jails, courts, or in contact with law enforcement to mental health and substance use disorder treatment. National data of veterans with VJO contact were used to describe demographic characteristics, and mental health and substance use disorder diagnoses and treatment use and test correlates of treatment entry and engagement using multi-level logistic regression models. Of the 37,542 VJO veterans, treatment entry was associated with being homeless and having a mental health disorder or both a mental health and a substance use disorder versus a substance use disorder only. Being American Indian/Alaskan Native was associated with lower odds of treatment entry. Engagement was associated with female gender, older age, Asian race, urban residence, and homeless status. Increased utilization of substance use disorder treatment, especially pharmacotherapy, is an important quality improvement target.

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Background: Metaphors are common in psychotherapy and have potential to enhance therapy in numerous ways. However, the empirical study of metaphors in cognitive behaviour therapy (CBT) has tended to be put in the “too hard basket”, confined to being part of the art rather than the science of therapy. The lack of research is largely due to problems with definition, lack of a consistent, reliable approach to metaphor identification and the challenges of finding appropriate methodology to study this language-based activity.

Aims: This study aimed to assess the frequency of metaphors in CBT in a large sample of therapy sessions and to evaluate the reliability and utility of the discourse dynamics approach to metaphor identification.

Method: The discourse dynamics approach, recently developed by linguists, was used to identify metaphors in 48 CBT session transcripts (from 12 clients and 3 therapists) and the reliability of this approach was evaluated, using an independent rater.

Results: The total frequency of metaphors was 31.5 (range 17–49) per 1000 words of therapy conversation. Therapists produced metaphors twice as often (21.2, range 7–36) as clients (10.3, range 3–24). Reliability of the Discourse Dynamics approach was adequate.

Conclusions: Metaphors clearly occur in CBT sessions, with therapists using them at a higher rate than clients. While Discourse Dynamics is currently the most detailed identification approach available for investigating metaphor in CBT sessions, it is challenging to acquire skill in it and we found only adequate reliability. Ways to improve reliability and future research possibilities are discussed.

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Anger: The Unrecognized Emotion in Emotional Disorders.
Anger plays a prominent definitional role in some psychological disorders currently widely scattered across DSM-5 categories (e.g., intermittent explosive disorder, borderline personality disorder). But the presence and consequences of anger in the emotional disorders (e.g., anxiety disorders, depressive disorders) remain sparsely examined. In this review, we examine the presence of anger in the emotional disorders and find that anger is elevated across these disorders and, when it is present, is associated with negative consequences, including greater symptom severity and worse treatment response. Based on this evidence, anger appears to be an important and understudied emotion in the development, maintenance, and treatment of emotional disorders.

James F. Boswell

Cassielo-Robbins and Barlow (2016) offer a long-overdue critical analysis of the nature and function of anger in emotional disorders and their treatment. If not unrecognized, the basic emotion of anger has certainly been underemphasized in the prevailing diagnostic classification system and focus on diagnosis-specific treatments for single disorders. In this commentary, I briefly highlight a few examples of complementary clinical resources where anger is more consistently and explicitly addressed. The chosen examples are intentionally selected from multiple theoretical orientations to demonstrate that anger has been unrecognized primarily within a specific context, and that there is considerable convergence in how anger is being considered across seemingly divergent approaches. Finally, I offer some of my own recommendations for practice and training.
A Meta-Analysis of Hypnotherapeutic Techniques in the Treatment of PTSD Symptoms.

Siobhan K. O'Toole, Shelby L. Solomon and Stephen A. Bergdahl

Journal of Traumatic Stress
Article first published online: 8 FEB 2016
DOI: 10.1002/jts.22077

The efficacy of hypnotherapeutic techniques as treatment for symptoms of posttraumatic stress disorder (PTSD) was explored through meta-analytic methods. Studies were selected through a search of 29 databases. Altogether, 81 studies discussing hypnotherapy and PTSD were reviewed for inclusion criteria. The outcomes of 6 studies representing 391 participants were analyzed using meta-analysis. Evaluation of effect sizes related to avoidance and intrusion, in addition to overall PTSD symptoms after hypnotherapy treatment, revealed that all studies showed that hypnotherapy had a positive effect on PTSD symptoms. The overall Cohen's d was large (−1.18) and statistically significant (p < .001). Effect sizes varied based on study quality; however, they were large and statistically significant. Using the classic fail-safe N to assess for publication bias, it was determined it would take 290 nonsignificant studies to nullify these findings.

Alcohol use in the military: Associations with health and wellbeing.

Waller, Michael; McGuire, Annabel CL and Dobson, Annette J.

Journal of Military and Veterans Health
Vol. 23, No. 3, Jul 2015: 34-49

Background:
This study assessed the extent to which alcohol consumption in a military group differed from the general population, and how alcohol affected the military group's health and social functioning.

Methods:
A cross sectional survey of military personnel (n = 5311) collected self-reported data on alcohol use (AUDIT scale) and general health, role limitations because of physical health problems (role physical), and social functioning scores (SF36 subscales). Logistic regression was used to compare drinking behaviours between the military sample and a general population sample, using the categories risky drinkers (>2 units per day), low risk drinkers (<=2 standard drinks per day) and abstainers. Groups in the military sample with the highest levels of alcohol misuse
(harmful drinking AUDIT >= 16, alcohol dependence AUDIT >= 20, and binge drinking) were also identified. Linear regression models were then used to assess the association between alcohol misuse and SF36 scores.

Results:
The there were fewer risky drinkers in the military sample than in the general population sample. There were also fewer abstainers, but more people who drank at a lower risk level (<=2 standard drinks per day), than in a sample of the general population. Harmful drinking and alcohol dependence were most commonly observed in men, younger age groups, non-commissioned officers and lower ranks as well as reserve and exserving groups. Alcohol misuse was clearly associated with poorer general health scores, more role limitations because of physical health problems, and lower social functioning.

Conclusions:
Although risky drinking was lower in the military group than in the general population, drinking was associated with poorer health, more limitations because of physical health problems, and poorer social functioning in Defence members. These results highlight the potential benefits for Defence forces in reducing alcohol use among members, in both those groups identified at highest risk, and across the military workforce as a whole.

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Links of Interest

Veterans, Patriots and Pawns
http://www.nytimes.com/2016/02/05/opinion/veterans-patriots-and-pawns.html

VA: Veterans suicide must be a top priority

Virtual reality’s promise, risk loom large for health researchers

Neurobiological changes explain how mindfulness meditation improves health
http://www.sciencedaily.com/releases/2016/02/160204121956.htm

First-of-its-kind study explains why rest is critical after a concussion
http://www.sciencedaily.com/releases/2016/02/160205100445.htm

Better quality of care may reduce risk of death for patients on opioid painkillers
http://www.sciencedaily.com/releases/2016/02/160204175435.htm
Dear Google, Is There a Shrink for That?

Follow the poodle? Alternatives to prescription sleep medications
http://www.health.harvard.edu/blog/follow-the-poodle-alternatives-to-prescription-sleepmedications-201602109162

VA Hospital Care Improving, Study Suggests

Pregnancy and PTSD: Surprising findings could help moms-to-be at risk
http://www.sciencedaily.com/releases/2016/02/160210110754.htm

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Resource of the Week -- Management of Insomnia Disorder: Comparative Effectiveness Review (Agency for Healthcare Research and Quality)

Objective:
To assess the efficacy, comparative effectiveness, and harms of treatments for insomnia disorder in the general adult population and older adults.

Data sources:
Ovid MEDLINE®, the Cochrane Central Register of Controlled Trials, Embase®, and PsycINFO® bibliographic databases; hand searches of references of relevant studies.

Review methods:
Two investigators screened abstracts and full-text articles of identified references for eligibility. Eligible studies included systematic reviews, randomized controlled trials (RCTs), and long-term observational pharmacologic studies enrolling participants with insomnia disorder. We analyzed data for global outcomes (measures that assess both sleep and daytime functioning associated with sleep), sleep parameters, and harms. We assessed risk of bias for RCTs, extracted data, assessed quality of relevant systematic reviews, and evaluated strength of evidence for comparisons and outcomes. Pooled estimates were analyzed to assess the efficacy and comparative effectiveness of treatments.

Results:
We searched bibliographic databases through January 2015 for studies evaluating psychological, pharmacologic, and complementary and alternative medicine interventions for insomnia disorder. We synthesized evidence from 181 unique studies (data from 128 unique RCTs and 3 systematic reviews that synthesize data from 42 unique RCTs) and 12 observational studies. Sample sizes and enrollment criteria varied; most trials were short in duration. Outcome reporting and intervention effect sizes varied,
and a large placebo response was often observed. Cognitive behavioral therapy for insomnia (CBT-I) improved global outcomes and nearly all sleep parameters in the general adult population, older adults, and adults with pain. We found insufficient evidence on adverse effects of these interventions. Evidence was less robust for psychological interventions other than CBT-I, but low-strength evidence shows that some interventions improve some sleep outcomes. Low-to-moderate-strength evidence indicated that the nonbenzodiazepine hypnotics eszopiclone and zolpidem, and the orexin receptor antagonist suvorexant, improved short-term global and sleep outcomes in general adult populations. Doxepin improved sleep outcomes. The absolute mean effect was small. Evidence for benzodiazepine hypnotics, melatonin agonists, and antidepressants in general populations and for most pharmacologic interventions in older adults was generally insufficient. Evidence on adverse effects from RCT data was generally insufficient or low strength. Observational studies suggest that hypnotics may be associated with dementia, fractures, and major injury. Food and Drug Administration (FDA) labels warn about cognitive and behavioral changes, including driving impairment, and other harms, and advise lower doses for females and older/debilitated adults. Evidence on complementary and alternative medicine was insufficient. Evidence was insufficient to compare hypnotic medications within or across classes or versus CBT-I.

Conclusions:
CBT-I or medical therapy with eszopiclone, zolpidem, and suvorexant improve global and sleep outcomes for insomnia disorder. Clinical significance, applicability, comparative effectiveness, and long-term efficacy, especially among older adults, are less well known. Effect sizes vary, and a large placebo response is sometimes observed. Observational studies suggest an association of hypnotics with infrequent but serious harms. FDA labels provide specific warnings and precautions for drugs approved for insomnia.
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