Alliance Inventory-Short Revised (WAI-SR) form following Session 2, and the total score was calculated to measure working alliance quality (mean=75.6, SD=9.2).
Results: A two-stage hierarchical multiple regression analysis demonstrated that, after adjusting for pre-treatment insomnia severity scores, the quality of the working alliance was a significant predictor of insomnia severity scores at post-treatment ($F(2,61)=5.79$, $p<.005$) and accounted for 11.7% of the variance. There was a positive relationship between pre- and post-treatment insomnia severity ($\beta=.246$) and a negative relationship between working alliance quality and post-treatment insomnia severity ($\beta=-.344$).
Conclusion: A higher quality working alliance predicted lower insomnia severity rating at post-treatment in individual CBT for perinatal insomnia. A limitation of this study is its generalizability to populations with insomnia that are not pregnant women. Nonetheless, the results suggest that cultivating a high quality working alliance enhances clinical outcomes even within a short-term, skills-based treatment such as CBT-I.
Support (If Any): NR013662.

0399

THE EFFECTS OF CBTI+TIPS ON MATERNAL COGNITIONS ABOUT INFANT SLEEP AND INFANT NIGHTTIME SLEEP DURATION

Seeman S[1], Asarnow L[2], Roberston K[1], Rangel E[2], Simpson N[2], Manber R[2]
[1]PGSP-Stanford Psy.D. Consortium, Palo Alto, CA, [2]Stanford University, Palo Alto, CA

Introduction: Prior studies have found that parental concerns about limiting their nighttime involvement are associated with poorer infant sleep quality. We examined maternal cognitions about infant sleep in relation to their infants' sleep and maternal insomnia.
Methods: The sample consisted of 105 women in a randomized controlled trial for perinatal insomnia. They were randomized to cognitive-behavioral therapy for insomnia plus tips for infant sleep (CBTI+TIPS) or an active control insomnia therapy plus general education about infant sleep (CTRL). Treatment consisted of five weekly sessions during pregnancy and a sixth session at six weeks postpartum. Mothers completed the Infant Sleep Vignettes Interpretation Scale (ISVIS) that assesses parental sleep-related cognitions at 5 weeks postpartum, the Brief Infant Sleep Questionnaire (BISQ) at 30 weeks postpartum, and the Insomnia Severity Index (ISI) at both time points.
Results: Mothers in the CBTI+TIPS arm scored lower on the Distress subscale ($p=.028$) and higher on the Limits subscale ($p=.049$) of the ISVIS than mothers in the CTRL arm. In the whole sample, after adjusting for treatment, maternal depressive symptoms, insomnia severity, and nulliparous stats, regression analysis revealed that lower ISVIS-Distress scores at 5 weeks postpartum predicted longer duration of infant's nighttime sleep at 30 weeks postpartum ($N=72$, beta=-.316, $p=.003$). Mothers with scores below the median (3.71) on the ISVIS-Distress subscale reported their infants slept 36 minutes longer at night (602 vs. 566 minutes) at 30 weeks. However, ISVIS scores at 5 weeks postpartum did not predict maternal insomnia severity at 30 weeks postpartum.
Conclusion: Mothers who had insomnia during pregnancy benefited from CBTI+TIPS by learning tools for setting the stage for healthy infant sleep development. They were less likely to interpret infant night-wakings as a sign of distress and more likely to emphasize the importance of limiting parental nighttime involvement. It is unclear if these results will generalize to new mothers without prior histories of insomnia. Nonetheless, it appears that having realistic expectations about infant sleep during the early postpartum can translate to longer infant sleep duration later.
Support (If Any): NR01366204.

0400

PREDICTORS OF INITIATION AND ATTENDANCE IN COGNITIVE-BEHAVIORAL THERAPY FOR INSOMNIA (CBT-I) AMONG LATINA AND NON-LATINA CAUCASIAN PREGNANT WOMEN

Rangel E, Simpson N, Asarnow L, Manber R
Stanford University, Palo Alto, CA

Introduction: Cognitive behavioral therapy for insomnia (CBT-I) has been shown to be effective in the general population, but little is known about the use of CBT-I among underserved populations. Previous studies have shown that people of Latino ethnicity are less likely to engage in mental health interventions. Here, we focus on treatment initiation and attendance among Latina and non-Latina pregnant women in a randomized controlled trial of CBT-I.
Methods: Participants were Latina (mean age=32.03 ± 5.60 years, n=62) and non-Latina Caucasian pregnant women (mean age=32.98 ± 4.74 years, n=67) with insomnia disorder who were enrolled in a randomized controlled trial of CBT-I. The Insomnia Severity Index (ISI) and Edinburgh Postnatal Depression Scale (EPDS) were administered at screening.
Results: A logistic regression demonstrated that Latina ethnicity was a significant predictor of non-initiation of treatment (no sessions attended) after adjusting for ISI, EPDS, working status, and parity ($\beta=-2.45$, $p=.03$, $n=129$). No other factors in the model were significant predictors. For the number of sessions attended after initiation, an independent samples t-test found that Latina women attended fewer sessions ($M=4.4$, $SD=1.2$, $n=50$) than Non-Latina Caucasian women ($M=4.7$, $SD=0.7$, $n=66$; $t(114)=-1.98$, $p=.05$). However, in a regression analysis adjusting for ISI and EPDS and including working status and parity, ethnicity was not a significant predictor of fewer sessions attended, $F(5, 109)=1.04$, $p=.40$.
Conclusion: In a randomized controlled trial of CBT-I, Latina pregnant women with insomnia had a significantly lower likelihood of initiating treatment, but were equally likely to stay in treatment once they began. Focused research on identifying and reducing barriers to engagement in CBT-I among Latinx populations is a critical step to increase access to treatment among this underserved population.
Support (If Any): NR013662.

0401

COGNITIVE BEHAVIORAL THERAPY FOR INSOMNIA IS EQUALLY EFFECTIVE FOR INSOMNIA PATIENTS WITH SHORT AND LONGER OBJECTIVE SLEEP DURATION

Yang C[1], Huang Y[2], Jan Y[3], Lee H[4]
[1]National Chengchi University, Taipei, TAIWAN, [2]Department of Psychology, National Chengchi Univeristy, Taipei, TAIWAN, [3]Sleep Center of Taipei Medical University Hospital, Taipei, TAIWAN, [4]3Department of Psychiatry & Medical Humanities, School of Medicine, College of Medicine, Taipei Medical University, Taipei, TAIWAN

Introduction: Insomnia with short objective sleep duration has been proposed to be a specific phenotype of insomnia since it was found to be associated with higher risks of cardiometabolic and neuropsychiatric disorders. One recent study further reported that insomnia with actigraphy-defined short sleep duration (<6 h) are less responsive to CBT-I than those with longer sleep duration (≥6 h). The present study

examined whether insomnia patients with polysomnography-defined short sleep duration would also have blunted response to CBT-I.
Methods: 88 insomnia patients (mean age = 44.36 years, 61 females), without comorbid psychiatric, medical, or sleep disorders, participated in this study. They were divided into a short-sleep-duration group (<6 h; N=22; mean age = 42.54 years) and a longer-sleep-duration group (≥6 h; N=44; mean age = 44.97) based on one night of PSG. They all went through a 6-session CBT-I program over a 7-week period, and were required to complete the Insomnia Severity Index (ISI) before and after treatment, and to keep sleep logs throughout the treatment period.
Results: 2 (short-sleep vs longer-sleep group) X 2 (pre-treatment vs post-treatment) two-way ANOVAs were conducted. The results showed significant treatment main effects on the ISI, and on sleep efficiency, wake time after sleep onset, and self-rated sleep quality and daytime functioning from sleep logs, but no significant group main effects and interactions. Both groups gained significant improvements in these variables. No significant effects were found for total sleep time and sleep onset latency.
Conclusion: Our results showed that CBT-I is equally effective for insomnia patients with short and near-normal objective sleep duration. These results are inconsistent with the previous finding that insomnia patients with objective short sleep duration had a blunted response to CBT-I. The inconsistency might be due to the different measures used to define objective sleep duration and/or the difference in the components included in the CBT-I programs. Further studies are needed to address these issues.
Support (If Any): This study is partially supported by the Ministry of Science and Technology, Taiwan (NSC104-2410-H-004-044-MY3).

0402

EFFECTIVENESS OF ULTRA-BRIEF CBTI IN A COMPLEX CLINICAL POPULATION

Loewy DH
Scripps Clinic Sleep Center, L Jolla, CA

Introduction: The first line treatment for chronic insomnia is cognitive behavioral therapy for insomnia (CBTi) as endorsed by the American College of Physicians (2016). CBTi is a constellation of behavioral and cognitive techniques for improving natural sleep. Randomized, controlled studies of CBTi typically involve 4 to 8 treatment sessions and participants are often highly selected. In clinical practice, insomnia patients can be complicated and there may be limits on the number of allowable treatment sessions. The purpose of this study was to assess the effectiveness of ultra-brief CBTi in a complex clinical population.
Methods: Subjects included 366 female and male patients (18 to 90 years) referred for CBTi. The only inclusion criterion was a diagnosis of chronic insomnia and/or circadian rhythm disorder. The Insomnia Severity Index (ISI) was administered at consultation (baseline) and at each follow up. A retrospective analysis was conducted with change on the ISI between baseline and final CBTi visit as the primary outcome measure. A decrease of 6 points on the 28-point scale represents minimal clinically significant change. Secondary measure of interest was change in sedative hypnotic use. The presence of co-morbid sleep and psychiatric disorders was recorded.
Results: Of the 366 CBTi consults, 234 (63.9%) returned for at least one follow up. Median number of follow up visits was 2.0 (range 1 to 6). Median ISI score for the 234 follow up patients was 19.0 at baseline and 12.0 at final visit for a delta of -7.0 ($p < .0001$; Mann-Whitney Test). At baseline, 62.6% of patients were using at least one hypnotic. At final CBTi visit, 27.0% discontinued all sleep medications, 32.7 reduced sleep medications, 36.5% were unchanged, and 2.9% increased or added a sleep medication. One co-morbid condition was present in 60.7% and more than one in 23.1% of all patients.
Conclusion: Ultra-brief CBTi can be beneficial for complex insomnia patients.
Support (If Any): Partial funding provided by the Scripps Medical Group Research Grant and by the Beckman Foundation and Warren Foundation.

0403

TELE-SELF CBTI: PROVIDER SUPPORTED SELF-MANAGEMENT COGNITIVE BEHAVIORAL THERAPY FOR INSOMNIA

Ulmer CS[1], Bosworth HB[1], Voils CI[2], Germain A[3], Macy S[1], Jeffreys AS[1], Beckham JC[1]
[1]Durham VA Healthcare System, Durham, NC, [2]William S. Middleton Memorial Veterans Hospital, Madison, WI, [3]University of Pittsburgh School of Medicine, Pittsburgh, PA

Introduction: Insomnia is pervasive among Veterans, but Veteran access to the standard of care (CBTI) is limited. Self-management CBTI requires fewer provider resources and Veterans prefer provider support with self-management. Prior self-management CBTI findings may not generalize to Veterans since individuals with mental health disorders, which are prevalent among Veterans, were largely excluded from these trials. Moreover, support was provided by mental health providers in past trials; an approach that isn't feasible within the VA where mental health providers are overextended. Tele-Self CBTI, the combination of self-management CBTI and phone-based provider support, could increase Veteran access to CBTI.
Methods: To assess the feasibility of Tele-Self CBTI, we randomized Veterans with Insomnia Disorder (69% with a mental health condition) to Tele-Self CBTI (N=8) or a Health Education Control (HEC: N=8); both involving weekly nurse phone contacts (up to 20 minutes). Assessments occurred at Baseline and Week 7 and included: one week of interactive voice response sleep diaries and actigraphy, and self-report measures assessing insomnia severity; depression; fatigue; and quality of life. Treatment acceptability (interviews) and acquisition of CBTI knowledge (questionnaire) were assessed at study completion.
Results: Veteran feedback on Tele-Self CBTI was favorable. Nurse support was particularly appealing to Veterans. All enrolled Veterans (100% in both arms) completed the study, and 98% of sleep diaries were completed. Although underpowered to infer efficacy, preliminary findings suggest evidence of a "signal". With few exceptions, Tele-Self CBTI scores moved in a favorable direction from baseline, including insomnia severity (down 23%), depression (down 32%), fatigue (down 12%), wake after sleep onset (down 17 minutes), sleep efficiency (up 9%), time in bed (down 36 minutes), and acquisition of CBTI concepts (up 24%). In contrast, HEC scores regressed on most measures.
Conclusion: The study protocol was feasible and acceptable to Veterans. Tele-Self CBTI may be a viable option for increasing Veteran access to CBTI. Future efficacy studies are pending.
Support (If Any): Drs. Ulmer, Beckham, Bosworth, and Voils were supported by Veterans Affairs Research Awards while working on this study. Dr. Germain was funded by DOD.

0404

A NOVEL APPROACH TO SLEEP DISTURBANCES IN THE INPATIENT PSYCHIATRIC SETTING: VIDEO-BASED COGNITIVE BEHAVIORAL THERAPY FOR INSOMNIA

Brock MS[1], Mysliwiec V[1], Germain A[2], Fullam T[1], Xuan D[1], Sidari L[1], Cleaves E[1], Jackson C[1], Willis A[1], Park J[3], Mansfield J[1], Weidlich C[1], Malone R[3], Burson R[1]