A. Basic Sleep Science Poster Presentations

patient and family/carer needs are to be met, and for healthcare policy to remain targeted and trusted by the public.

P128

SLEEP NEED IS MORE STRONGLY ASSOCIATED WITH SELF-RATED HEALTH AND DAYTIME FUNCTION THAN SLEEP DURATION.

<u>Scott H^{l} </u>, Appleton S^{l} , Reynolds A^{l} , Gill T^{2} , Melaku Y^{l} , Adams R^{l} , Catcheside P^{l} , Perlis M^{3}

¹Flinders Health and Medical Research Institute: Sleep Health, Flinders University, Adelaide, Australia, ²Adelaide Medical School, The University of Adelaide, Adelaide, Australia, ³Behavioral Sleep Medicine Program, Department of Psychiatry, University of Pennsylvania, Philadelphia, US

Introduction: Most studies examining associations between sleep and health outcomes focus on sleep duration or efficiency, ignoring individual differences in sleep need. We investigated whether sleep need is a more influential correlate of self-rated daytime function and health than sleep duration.

Methods: This study is a secondary analysis of the 2019 Sleep Health Foundation online survey of adult Australians (N=2,044, aged 18–90 years). Hierarchical multiple linear regressions assessed variance explained by demographics (Model 1: age, sex, BMI), self-reported sleep duration (Model 2: Model 1 + weighted variable of weekday/weekend sleep duration), and individual sleep need (Model 3: Model 2+ how often they get enough sleep to feel their best the next day, on a 5-point scale) on daytime function items for fatigue, concentration, motivation, and overall self-rated health (EQ-5D, VAS 0–100).

Results: Sleep need explained an additional 17.5–18.7% of the variance in fatigue, concentration, motivation, and health rating (all p < 0.001 for R^2 change) in Model 3. Model 2 showed that sleep duration alone only explained 2.0–4.1% of the variance in these outcomes. Findings were similar when stratified by sex. Sleep need also explained greater variance for older adults than for younger and middle-aged adults, especially on health rating (Model 3: R^2 change = 0.11 for ages 18-24y, 0.14 for 45-54y, 0.27 for 75y+).

Conclusions: Sleep need explains more variance in daytime function and self-rated health than sleep duration. The role of sleep need on other daytime consequences, and in clinical populations, needs further exploration.

P129

A SUBSTANTIAL PERCENTAGE OF PATIENTS WITH CHRONIC INSOMNIA DO NOT APPRECIABLY INCREASE TOTAL SLEEP TIME AFTER COGNITIVE BEHAVIOURAL THERAPY FOR INSOMNIA.

<u>Scott H¹</u>, Cheung J², Muench A³, Ivers H⁴, Grandner M⁵, Lack L¹, Morin C^4 , Perlis M³

¹Flinders Health and Medical Research Institute: Sleep Health, Flinders University, Adelaide, Australia, ²School of Pharmacy, Faculty of Medicine and Health, The University of Sydney, Sydney, Australia, ³Department of Psychiatry, University of Pennsylvania, Philadelphia, US, ⁴School of Psychology and BRAIN Research Center, Université Laval, Québec City, Canada, ⁵Department of Psychiatry, University of Arizona, Tucson, US

Introduction: Total sleep time (TST) does not exceed baseline for the majority of patients after CBT-I. However by follow-up, TST increases by almost 1 hour on average. The current study

investigated the extent to which this TST improvement is common and assessed for baseline predictors of increased TST after CBT-I. **Methods:** This study is an archival analysis of data from a randomised clinical trial comparing acute CBT-I to acute CBT-I plus maintenance therapy (N = 80). The percent of patients that exceeded baseline TST by $\geq \! 30$ minutes was assessed at post treatment and 3, 6, 12, and 24 months following treatment. Linear mixed models were conducted to assess the effect of patient demographics (age, sex, ethnicity, marital status), and baseline Sleep Diaryreported sleep continuity and Insomnia Severity Index (ISI) scores on changes in TST.

Results: 17% of patients achieved an appreciable increase in TST by treatment end, and this proportion only increased to 58% over time. Sleep Diary-reported sleep latency, wake after sleep onset, early morning awakenings, total wake time, TST, and sleep efficiency at baseline were associated with greater increases in TST after CBT-I (interaction ps < .03). Demographics and ISI scores were not significant predictors (interaction ps > .07).

Conclusion: A substantial proportion of patients do not appreciably increase TST after CBT-I, but patients with more severe sleep continuity disturbances at baseline exhibited the largest improvements. Whether all patients could increase their TST even further after CBT-I is a topic for further investigation.

P130

AN AUDIT OF URINARY DRUG SCREENING USE IN MULTIPLE SLEEP LATENCY AND MAINTENANCE OF WAKEFULNESS TESTING IN AN AUSTRALIAN TERTIARY CENTRE

<u>Semasinghe Bandaralage $S^{1,2,3}$ </u>, Sriram $B^{1,2}$, Rafla M^{1} , Sharma N^{1} , $McWhae S^{1}$

¹Sleep Disorders Centre, Gold Coast University Hospital, Queensland Health, Southport, Australia, ²School of Medicine, Griffith University, Southport, Australia, ³School of Medicine, The University of Queensland, Herston, Australia

Multiple sleep latency test (MSLT) and maintenance of wakefulness test (MWT) are objective measures of excessive day-time sleepiness, used in diagnosing and monitoring patients with sleep disorders. MSLT and MWT can be affected by substances such as psychotropics, stimulants, opioids and sedatives. Recent studies demonstrate high prevalence of positive urine drug screening (UDS) results in patients undergoing MSLT and MWT.

We retrospectively audited patients who underwent UDS with MSLT/MWT at a tertiary centre from 1st January 2019 to 1st January 2020. The following data was collected: MSLT/MWT/UDS results, sleep disorder diagnosis/es, return to driving/work after testing and pre-existing and subsequent prescription of stimulants/wakefulness-promoting agents/psychotropics/sodium oxybate.

Our cohort featured 32 patients (23 female). 29 MSLTs and 3 MWTs were performed. Median age was 31 years old. 13 patients were on wakefulness-promoting agents/psychotropics when tested, where 8 were on serotonin–norepinephrine reuptake inhibitors/selective serotonin reuptake inhibitors.

13 patients (~45%) had a reduced mean sleep latency (MSL), where 10 minutes was used as the cut-off. All 3 MWTs were within normal limits. 5 patients (~16%) had a positive UDS. 1 patient had a low MSL and tested positive for cannabinoids and opioids. The other 4 patients with normal MSL tested positive for benzodiazepines (2), cannabinoids (1) and opioids (1). All patients were cleared for