to. Many patients received treatment that was discordant with their treatments preferences suggesting intentional non adherence. This discordance implies the decision aid did not influence initial treatment obtained suggesting the decision aid would need to be integrated in to clinical practice.

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REM Behavior Disorders
POLYSOMNOGRAPHIC FEATURES OF REM SLEEP BEHAVIOR DISORDER WITH OR WITHOUT PARKINSON'S DISEASE

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Introduction: REM sleep behavior disorder (RBD) precedes, in approximately 80% of cases, the development of synucleinopathies, such as Parkinson's disease (PD), therefore it is likely considered to reflect a prodromal stage of PD. We analyzed the differences of polysomnographic variables between the patients of idiopathic RBD without PD and RBD accompanied with PD.

Materials and methods: We retrospectively reviewed the results of 50 patients with only idiopathic RBD (RBD-PD) and 42 patients with RBD and PD (RBD+PD) who underwent full night polysomnography (PSG) because of the abnormal behavior during sleep from January 2010 to December 2016 at our sleep center.

Results: Demographic variables, including age, sex, and body mass indexes, etc., were not significantly different between the groups. REM sleep latency was significantly prolonged ($p=0.009$) and REM sleep efficiency was more diminished ($p=0.02$) in the RBD+PD group compared to the RBD-PD group. The tonic and phasic muscle activities during REM sleep were not significantly different between the groups. Sleep latency, sleep efficiency, indices/hour of arousals, awakenings, respiratory parameters, and periodic leg movements were similar in both groups.

Conclusions: The generation of REM sleep itself is more likely to be impaired in the RBD+PD group compared to the RBD-PD group, although the degree of REM without atonia was not significantly different. Otherwise, there were no further PD-inherent differences in the PSG parameters.

Other
SLEEP HYGIENE PATTERN AND BEHAVIORS AND RELATED FACTORS AMONG GENERAL POPULATION IN DOROOD, IRAN

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Introduction: Sleep hygiene was found as an important predictor for sleep quality. People's sleep hygiene can have a major role in their daily function. The purpose of the study was to determine sleep hygiene patterns and sleep hygiene behaviors and factors affecting them in the general population of Doorod, Iran.

Material and methods: In this cross-sectional study, 915 men and 616 women were selected randomly from 25 clusters of different parts of the city. The inclusion criteria were age between 18 and 65 years and living in Doorod. The exclusion criteria were psychiatric disorder and known general medical conditions that affecting sleep. The data collection instruments were demographic questionnaire and Sleep Hygiene Questionnaire, consisted of 13 items about biological rhythm and bed room environment and behaviors that affecting sleep. Data were analyzed by using SPSS version 16 software.

Results: The highest percentage was obtained for irregular woke and went up from day to day or at weekend and holidays (72.8%). Only 8.9% participants were classified as having good sleep hygiene. The mean age of very poor, poor, moderate, and good sleepers was 32.8 ± 12.4, 31.7 ± 16.4, 38.5 ± 12.8, and 35 ± 13.7 years, respectively. There were significant differences between the age of poor and moderate sleepers and also sleep hygiene patterns with respect to sex, education level and job.

Conclusion: Poor sleep hygiene were more frequent in Iranian peoples and the major problem in sleep hygiene in our study was inappropriate sleep schedule.

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Chronobiology/Circadian Disorders
FUNCTIONAL CONNECTIVITY DIFFERENCES BETWEEN EARLY AND LATE CIRCADIAN PHENOTYPES PREDICT COGNITIVE PERFORMANCE AND DAYTIME SLEEPINESS

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Introduction: Brain function, and consequently behaviour, relies on interactions within and between distributed brain networks. This can be examined using functional MRI, with time series correlation between regions defining functional connectivity (FC). FC is altered during sleep, during wakefulness according to prior sleep habits, and in a range of neurological and psychiatric disorders. However there is limited research on the impact of circadian phenotype or time of day on waking FC. The aim of this study was to investigate waking FC associated with the default mode network (DMN) in Early and Late circadian phenotypes (ECP/LCP).

Materials and methods: Thirty eight participants took part (N = 38, 14 male, age 22.7 ± 0.7 y), categorized into two groups by the Munich Chronotype Questionnaire (ECP n=16, LCP n=22). After completing sleep related questionnaires, physiological sampling (melatonin and cortisol) and actigraphy, participants were tested at 14.00 h, 20.00 h and 08.00 h (GMT). Testing consisted of a resting state functional MRI scan (TR=2 s, 3x3x4 mm voxels) and a structural T1 MRI scan (1 mm isotropic) in a 3 T Philips Achieva scanner with a 32 channel head coil, and was followed by cognitive and physical performance testing at the same facility. Seed based FC analysis from the mesial prefrontal (mPFC) and posterior cingulate (PCC) nodes of the DMN was performed using MATLAB with UF^{2}C and SPM12. To investigate whether FC differences between ECP and LCP were predictive of differences in cognitive performance and daytime sleepiness, generalized estimating equations were used.

Results: At the group level, ECPs had higher FC compared to LCPs in seven regions from the mPFC seed, and eight regions from the PCC seed (FWE corrected at p< 0.05), while LCPs had higher FC than ECPs in two and one region, respectively. For both seeds, the regions identified as different between the circadian phenotypes were primarily within the DMN. Time of day did not significantly modulate FC from either seed, and there was no interaction between circadian phenotype and time of day. For both mPFC and PCC seeds, regions with higher FC in ECPs were predictive of improved cognitive performance and daytime sleepiness. FC of regions higher in LCPs did not predict cognitive performance or daytime sleepiness.

Conclusions: Circadian phenotype is a significant predictor of FC within the DMN in the waking human brain. These differences in the brain's functional architecture at rest are predictive of differences in cognitive performance and daytime sleepiness, and may represent the underlying mechanism by which circadian phenotype affects performance.

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Technology/Technical
VALIDATION OF A MULTI-SENSORY COMMERCIALLY AVAILABLE WRISTBAND IN MEASURING SLEEP COMPOSITION AGAINST POLYSOMNOGRAPHY

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