Welcome to the regular podcast of the Journal of Clinical Sleep Medicine. I am Dr. Stuart Quan, editor of the Journal. These podcasts are a regular feature of each issue of the Journal and can be downloaded at the Journal’s website. Each podcast features summaries of important articles published in the current issue of the Journal, as well as occasional interviews with authors of these papers.

The first paper to be reviewed in this podcast is entitled, “Nightmares and Dysfunctional Beliefs about Sleep Mediate the Effect of Insomnia Symptoms on Suicidal Ideations,” by Dr. McCall and colleagues from the Department of Psychiatry and Behavioral Medicine and the Department of Biostatistical Sciences, Wake Forest University School of Medicine in Winston-Salem, NC, Department of Psychiatry, University of Louisville, Louisville, KY, Psychiatric Associates of North Carolina, Raleigh, NC, and the Department of Psychiatry and Health Behavior, Georgia Health Sciences University, Augusta, GA. Suicide is a leading cause of preventable death in the United States. Although major depressive disorder is responsible for most suicides, other factors are increasingly sought as possible modifiable risk factors so that they be identified and potentially addressed. Insomnia is the most common sleep disorder and there is some evidence linking insomnia to the risk of suicide. In this study, symptoms of depression, hopelessness, insomnia severity, dysfunctional beliefs and attitudes about sleep, nightmares and suicidal ideation intensity were assessed in 50 patients with depressive disorders. The authors found a positive association between insomnia and intensity of suicidal ideation in these depressed patients. Further, they noted that dysfunctional beliefs and attitudes about sleep, as well as nightmares, appeared to mediate the association between insomnia and suicidal ideation. The authors conclude that the impact of insomnia on the intensity of suicidal ideation appears to be mediated in part by nightmares as well as dysfunctional beliefs and attitudes about sleep. Thus, it is possible that intervention for insomnia may decrease suicidal risk in depressed patients.

The next paper to be discussed in this podcast is entitled, “Insomnia and Epilepsy: A Questionnaire-Based Study,” by Dr. Vendrame and colleagues from the Department of Neurology, Boston University, Boston, MA. Symptoms of disturbed sleep have been noted amongst patients with epilepsy. However, the exact prevalence and their impact on quality of life requires further investigation. In this study, 152 patients with epilepsy completed the Insomnia Severity Index, Pittsburgh Sleep Quality Inventory II, and the Quality of Life In Epilepsy Inventory - 31 questionnaires. It should be noted that patients with known obstructive sleep apnea were not included in this analysis. The mean age of the cohort was 46 years and the vast majority of the cohort had epilepsy of unknown etiology. They were not sleepy, with an Epworth Sleepiness Scale of only three. 48% of the cohort had a mood disorder and a number of the individuals had co-existent neurologic, cardiovascular and pulmonary conditions as well. On the basis of the insomnia severity index, 51% of the people in the study had moderate to severe insomnia. In addition, according to the Pittsburgh Sleep Quality Index, 72% of the cohort was classified as poor sleepers. There were two major characteristics which were different amongst the insomnia and poor sleep groups in comparison to non-insomniacs and good sleepers. The insomniacs were more likely to be female and in addition they were more likely to have been using multiple anti-epileptic drugs. Finally, after controlling for a number of variables simultaneously, insomnia and poor sleep quality were significant predictors for lower quality of life. Thus, it appears in an epileptic population, the presence of insomnia and poor sleep are common and adversely impact quality of life.

The final paper to be discussed in this podcast is entitled, “Periodic Limb Movements in Sleep Contribute to Further Cardiac Structure Abnormalities in Hemodialysis Patients with Restless Leg Syndrome,” by Dr. Giannaki and colleagues from the Departments of Nephrology, Neurology, and Pulmonary Medicine, School of Medicine, University of Thessaly, Larissa, Greece and the Department of Sports Science, University of Thessaly, Trikala, Greece, the Center for Research and Technology, Thessaly, Greece, the Research Institute for Sport & Exercise Sciences, Liverpool John Moore’s University, Liverpool, United Kingdom, and the Department of Life & Health Sciences, University of Nicosia, Cyprus. Restless leg syndrome, as well as, periodic limb movements of sleep are common findings of patients on hemodialysis. Some data analysis suggest that both periodic limb movements of sleep as well as restless legs syndrome may be associated with increased cardiovascular risk and increased cardiovascular morbidity and mortality amongst patients who are receiving hemodialysis. The purpose of this study was to determine whether periodic limb movements of sleep in patients with restless legs syndrome undergoing dialysis is associated with impairments in left ventricular function as determined by echocardiography. 19 patients were enrolled in the study who fulfilled criteria for restless legs syndrome. 10 of these individuals had periodic limb movements of sleep on polysomnography and nine did not. Heart rate and both awake and sleeping blood pressure were not different between
patients with periodic limb movements and those without periodic limb movements. Although there was no difference in ejection fraction, individuals with periodic limb movement had a larger left ventricular diameter during diastole and a higher left ventricular mass. Furthermore, the periodic limb movement index correlated with left ventricular mass and left ventricular diameter during diastole. These data indicate that the presence of periodic limb movements of sleep in patients with restless legs syndrome undergoing hemodialysis is associated with left ventricular abnormalities. The authors suggest that consideration be given to treatment of periodic limb movements of sleep to minimize the increase cardiac risk the findings may impart.

Finally, I would like to call the listeners’ attention to a review article in this issue of the Journal, entitled, “Effect of Oral Appliances on Blood Pressure in Obstructive Sleep Apnea: A Systematic Review and Meta-analysis,” by Dr. Iftikhar and colleagues from the University of South Carolina, School of Medicine, in Columbia, SC, and the William Jennings Bryan Dorn Veteran’s Affairs Hospital in Columbia, SC, and the Ohio State University in Columbus, OH. This article reviews data from observational and randomized controlled studies concerning the impact of oral appliances on arterial blood pressure. It concludes that there is a favorable effect of oral appliances on blood pressure but more randomized, controlled studies are needed.

This concludes the regular podcast of the Journal of Clinical Sleep Medicine. The listener is encouraged to read the contents of the Journal for additional information regarding each of the articles summarized in this podcast, as well as other papers published in this issue of the Journal.