

Getting a Good Night's Sleep: Sleep Disturbances in Patients with End Stage Kidney Disease (ESKD)

This webinar will start shortly

Become a member of DPC at <https://www.dialysispatients.org/get-involved/join-dpc/>

Follow us on social media:

Facebook: www.facebook.com/dpcedcenter

Twitter: @DPCEdCenter

LinkedIn: www.linkedin.com/company/dpcedcenter

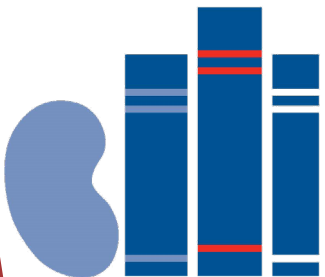
Instagram: @dpceduccenter

Today's Presenters

- ▶ Felicia Speed, LMSW
Vice President of Social Work Services,
Fresenius Medical Care North America

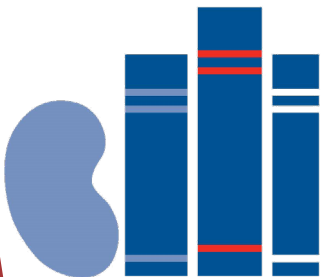


- ▶ Tricia McCarley, RN, MSN, ACNP
Vice President of Strategic Quality Operations,
Fresenius Medical Care North America



Objectives

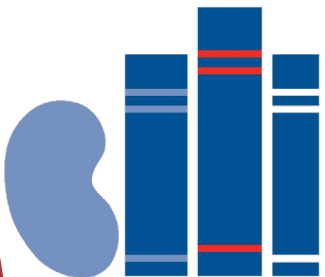
- ▶ Address the importance of sleep quality among ESKD patients
- ▶ Review the root causes of sleep disturbance among ESKD patients
- ▶ Discuss clinical and practical ways to improve sleep disturbance



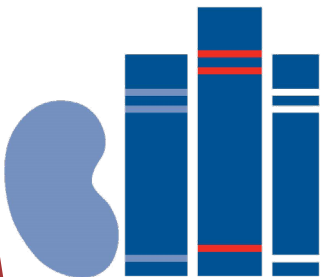
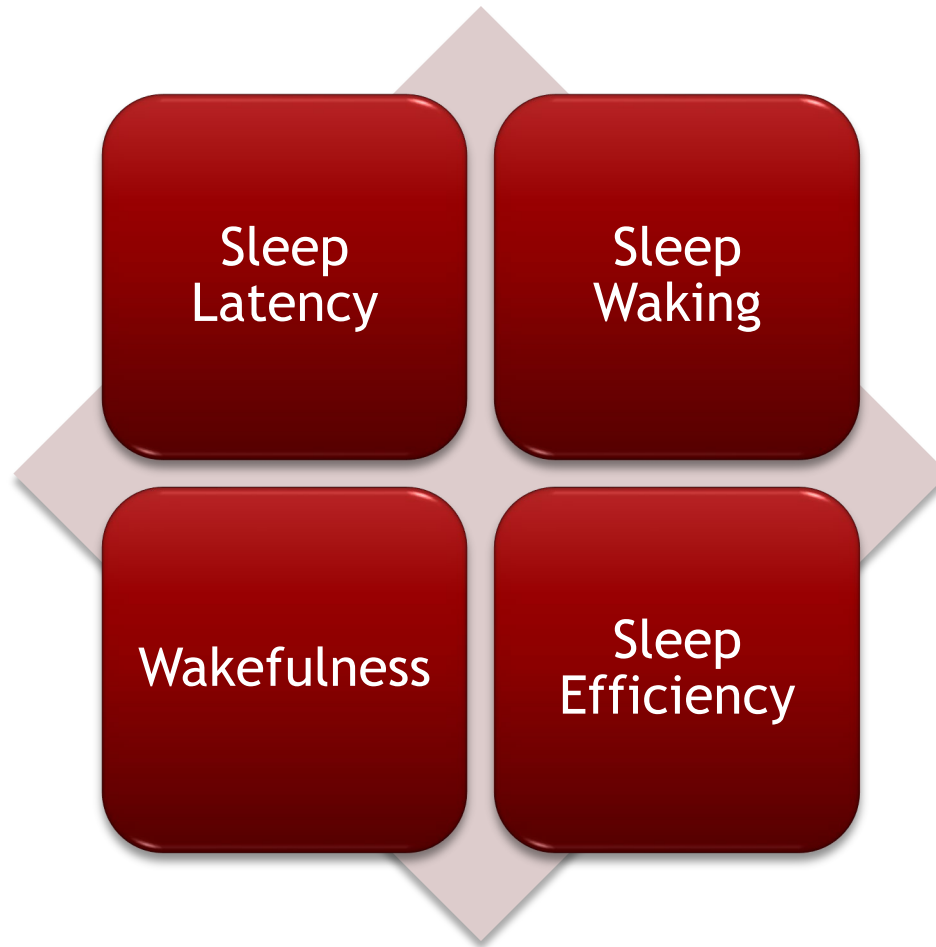
Sleep Quality

- ▶ Healthy Brain Function
- ▶ Emotional Well-Being
- ▶ Physical Health
- ▶ Daytime Performance and Safety
- ▶ Decision Making and Judgment

Age	Recommended Amount of Sleep
Infants aged 4-12 months	12-16 hours a day (including naps)
Children aged 1-2 years	11-14 hours a day (including naps)
Children aged 3-5 years	10-13 hours a day (including naps)
Children aged 6-12 years	9-12 hours a day
Teens aged 13-18 years	8-10 hours a day
Adults aged 18 years or older	7-8 hours a day



Calculating Sleep Quality



Insomnia

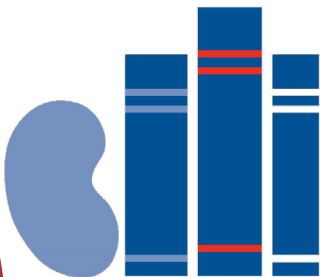
Most common medical complaint

Increase prevalence in patients on dialysis

Evaluation:

- Sleep onset difficulty
- Daytime sleepiness
- Early morning wakening
- Decreased sleep quality/Interrupted sleep

Sleep History or sleep diary



Sleep Diary

Weekly Sleep Diary

Week of: _____

Fill this in **Before Bed** each night

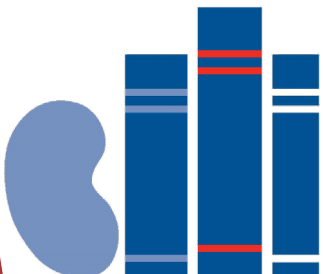
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Daytime Activities						
Length of any physical activity						
Daytime mood (stress/anxiety/etc)						
Any naps? If so time & length						
Mood before bed (stress/anxiety/etc)						
Time of any alcohol/caffeine						
List any food eaten after 8 pm						
Any electronics before bed?						
Calming activities before bed? (bath, meditation, etc)						
What time did you go to bed?						
Activities in bed (reading, sex, meditation, etc)						
What time were lights out?						

SOLUTIONS for Living
ENTWISTLE POWER OCCUPATIONAL THERAPY

One of the best ways you can tell if you are getting enough good quality sleep, and whether you have signs of a sleep disorder, is by keeping a sleep diary. Use this sample diary to get started.

—Source: NHLBI

		Name							
		Today's date (include month/day/year):	Mon*	Tues	Wed	Thurs	Fri	Sat	Sun
Complete in the Morning	Time I went to bed last night:	11 p.m.							
	Time I woke up this morning:	7 a.m.							
	No. of hours slept last night:	8							
	Number of awakenings and total time awake last night:	5 times 2 hours							
	How long I took to fall asleep last night:	30 mins.							
	How awake did I feel when I got up this morning? 1—Wide awake 2—Awake but a little tired 3—Sleepy	2							
Complete in the Evening	Number of caffeinated drinks (coffee, tea, cola) and time when I had them today:	1 drink at 8 p.m.							
	Number of alcoholic drinks (beer, wine, liquor) and time when I had them today:	2 drinks 9 p.m.							
	Nap times and lengths today:	3:30 p.m. 45 mins.							
	Exercise times and lengths today:	None							
	How sleepy did I feel during the day today? 1—So sleepy had to struggle to stay awake during much of the day 2—Somewhat tired	1							



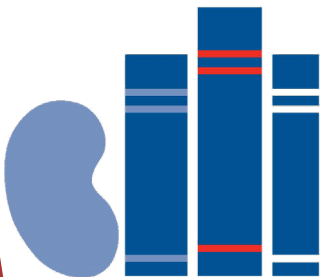
Why do patients on dialysis have trouble sleeping?

Co-Morbid Medical Conditions

- Metabolic factors associated with ESKD
- Restless leg syndrome
- Sleep Apnea
- Pain

Other Causes

- Stress
- Irregular Sleep Schedule
- Sleeping Environment
- Depression/Anxiety
- Other Mental Health Disorders



Metabolic Factors

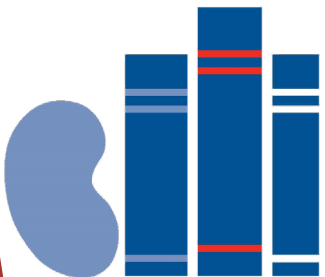
Uremia, Anemia,
Iron Deficiency,
Elevated calcium,
and Pruritis

Optimize Dialysis Therapy

- Adequate dialysis with waste product and fluid removal
- Management of Anemia and iron
- BMM management

Dialysis Treatments

- Home treatments at night - minimizing alarms



Restless Legs Syndrome (RLS)

Unpleasant sensation in legs (occasionally arms), accompanied by an urge to move them

- Typically occurs in the evening
- Worse during periods of inactivity

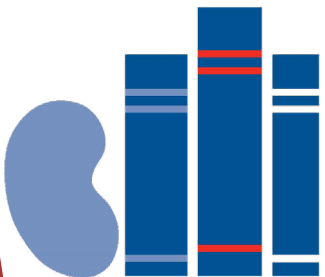
Associated with difficulty falling asleep and poor sleep quality

Pathogenesis is not understood - but may be linked to anemia, kidney disease, diabetes and MS

Medications (antidepressants) may exacerbate symptoms as well as caffeine, alcohol and nicotine

Symptoms may improve with exercise, adequate dialysis, treatment of anemia

Medications



Sleep Apnea

Medical Disorder where patients stop breathing during sleep

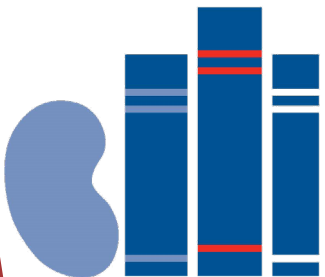
- Obstructive - the airway closes intermittently
- Central - intermittent loss of respiratory drive

Signs and Symptoms: loud snoring, witnessed episodes of apnea, morning headache, and daytime sleepiness or poor concentration during the day

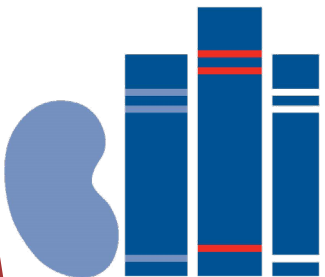
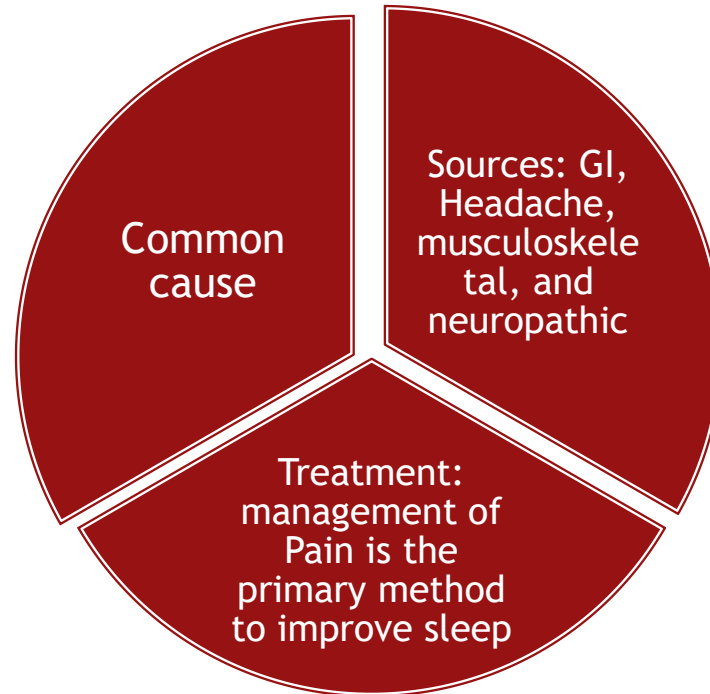
Associated with increased CVD progression risk

Diagnosis: Sleep Study

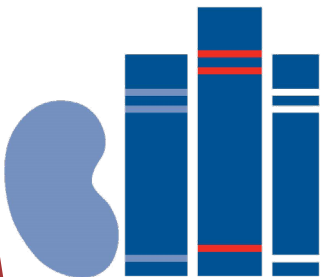
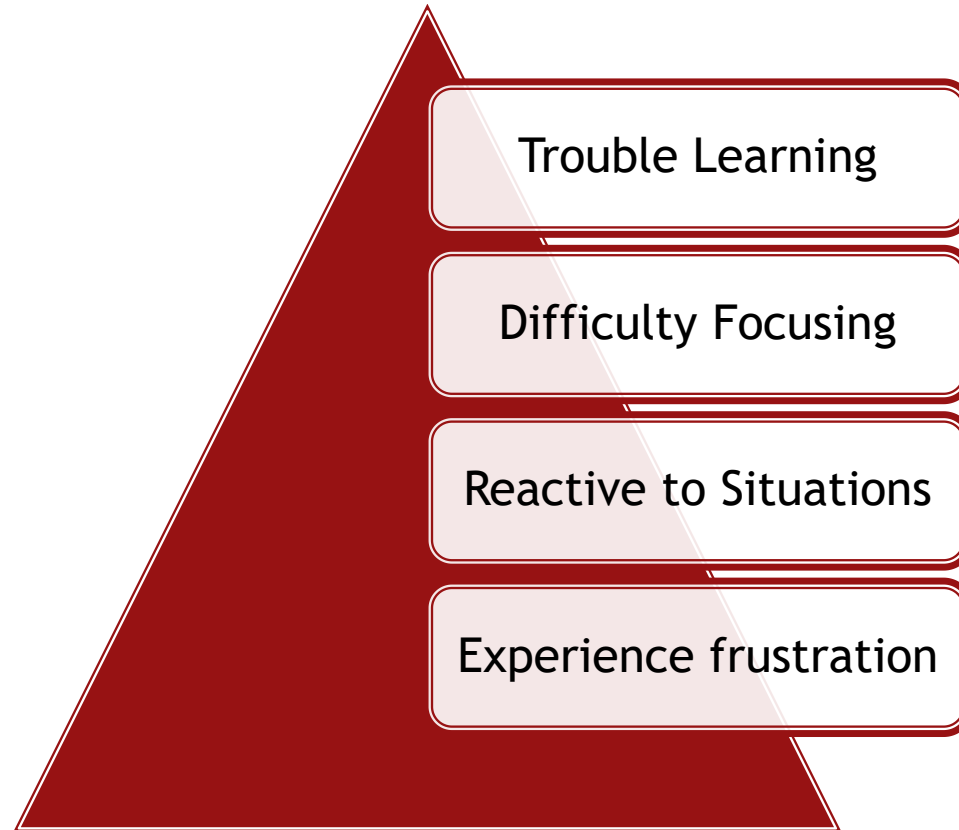
Treatment: Continuous Positive Airway Pressure (CPAP), Appliances that reposition the jaw, surgery



Pain



Sleep Deprivation



Strategies for Better Sleep Quality

Address
Co-Morbid
Conditions

Sleep
Schedule

Quiet Time

Avoid Heavy
Meals before
Bedtime

Avoid Nicotine
and Caffeine

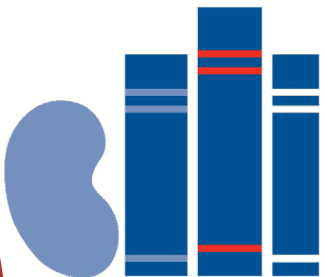
Increase
Physical
Activity

Create
Relaxing
Space

Use Relaxation
Techniques

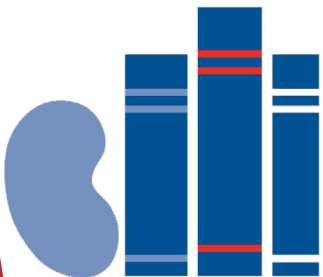
Increase
Sunlight
Exposure

Reduce Blue
Light Exposure
in the Evening



References

- ▶ Bonnet, M.H., Arand, D.L. (2021). Evaluation and diagnosis of insomnia in adults. UpToDate. Retrieved from [Evaluation and diagnosis of insomnia in adults- UpToDate](#)
- ▶ Elder, S., Pisonim R., Akizawa, T., et al. (2008). Sleep quality predicts quality of life and mortality risk in haemodialysis patients: Results from the Dialysis Outcomes and Practice Patterns Study (DOPPS), *Nephrology Dialysis Transplantation*, Volume 23, Issue 3, March 2008, Pages 998-1004, <https://doi.org/10.1093/ndt/gfm630>
- ▶ Hanly, P., Pierratos, A., & Mucsi, I. (2019). Sleep disorders in end-stage kidney disease. UpToDate. Retrieved from [Sleep disorders in end-stage kidney disease - UpToDate](#)
- ▶ National Heart, Lung, and Blood Institute. (2021). Sleep Deprivation and Deficiency. National Institute of Health. Retrieved from: <https://www.nhlbi.nih.gov/health-topics/sleep-deprivation-and-deficiency>
- ▶ MedlinePlus: National Library of Medicine (US). (2014, April 14). Healthy Sleep. Retrieved from <https://medlineplus.gov/healthysleep.html>
- ▶ National Sleep Foundation (2020). What is Sleep Quality. Retrieved from: <https://www.thensf.org/what-is-sleep-quality/>
- ▶ Roumelioti, M. E., Buysse, D. J., Sanders, M. H., Strollo, P., Newman, A. B., & Unruh, M. L. (2011). *Sleep-disordered breathing and excessive daytime sleepiness in chronic kidney disease and hemodialysis*. *Clinical journal of the American Society of Nephrology*: : CJASN, 6(5), 986-994. <https://doi.org/10.2215/CJN.05720710>
- ▶ Wang, R., Tang, C., Chen, X et al. (2016). Poor sleep and reduced quality of life were associated with symptom distress in patients receiving maintenance hemodialysis. *Health Quality Life Outcomes*, 14(125). Retrieved from: <https://doi.org/10.1186/s12955-016-0531-6>



Questions

Please use the Chat Box



Thank You for Attending Today!

**Please complete
the Feedback Form**

**Sign up for our next webinar, Update on
COVID-19 Vaccines on Sept 23 at 2pm EST**

**[https://www.dpcedcenter.org/news-
events/education-webinars/](https://www.dpcedcenter.org/news-events/education-webinars/)**

**Become a Member of DPC and enjoy its
benefits at**

<https://www.dialysispatients.org/get-involved/join-dpc/>

