



It all starts with sleep.

Alaska Sleep Clinic recognizes that women's sleep issues are different than men's. Women often underestimate the seriousness of their sleep issues. Alaska Sleep Clinic would like to open this discussion of the specific sleep problems that women encounter.



Why get a sleep study?

Women suffering from sleep apnea are more likely to present with:

- fatigue
- depression
- lack of energy
- sleepiness
- chronic fatigue
- frequent awakenings
- awakening frequently to urinate
- awakening gasping
- un-refreshed sleep
- dry throat in the morning
- migraines
- fibromyalgia
- irritable bowel syndrome
- night sweats
- hypothyroidism
- high blood pressure
- diabetes

See reverse for more information on:

Child bearing years



Pregnancy



Peri- & post-menopausal

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Child bearing years¹

- Among pre-menopausal women, the prevalence of mild sleep apnea was 10.8%, whereas 3.6% had at least a moderate obstructive sleep apnea (OSA).
- Even minimal degree of OSA was associated with greater odds of developing hypertension at 4 year compared with those with no sleep apnea.
- The prevalence of OSA among women with polycystic ovarian syndrome could be as high as 70%. Routine risk assessment for OSA is now recommended for all women with polycystic ovarian syndrome.
- Relevant to women of childbearing age, OSA may affect hormonal profile amongst pre-menopausal women, regularity of menstruation cycles and hence, it could impair female fertility.

Pregnancy^{1,2}

- Chronic hypertensive women should be strongly considered for diagnosis and treatment of OSA prior to or beginning as early as possible in pregnancy to help maintain blood pressure control.
- Incidental snoring is frequently encountered during pregnancy and should be considered as a warning for increased risk of developing high blood pressure during pregnancy.
- OSA among obese pregnant women is associated with a more frequent preeclampsia, neonatal intensive care unit admissions, and cesarean delivery.

Peri and post menopausal^{3,4}

- OSA is associated with sexual dysfunction in both premenopausal and postmenopausal women in a dose-related fashion.
- Sleep Disorder Breathing increases markedly at menopause for reasons that include both weight gain and unclear hormonal mechanisms.
- ¼ to ½ of all women will note some sleep complaint during menopause as compared to approximately 15% of the general population.
- Treatment of sleep itself seems to improve, if not resolve Fibromyalgia
- Post-menopausal women with insomnia generally have been shown to have lower melatonin levels than their cohorts.
- The “Domino” theory of sleep disruption has long been thought to be at least one explanation for menopausal depression. This theory proposes that sleep is disturbed by hot flashes or other menopausal related reasons. Insomnia follows sleep disruption and depression follows insomnia.

¹Champagne, K.A., Kimoff, R.J., Barriga, P.C., Schwartzman, K. "Sleep disordered breathing in women of childbearing & during pregnancy." *Indian Journal of Medicine* (2010): 285-301. Web.

²Louis, J., Auckley, D., Miladinovic, B. et al. "Perinatal Outcomes Associated with Obstructive Sleep Apnea in Obese Pregnant Women." *Obstetrics & Gynecology* 120.4 (2012): 1-9. Web.

³Eichling, P.S. & Sahni, J. "Menopause Related Sleep Disorders." *Journal of Clinical Sleep Medicine* 1.3 (2005): 291-298. Web.

⁴Stavaras, C., Pastaka, C. et al. (2012) "Sexual function in pre- and post-menopausal women with obstructive sleep apnea syndrome." *Int J Impot Res* 24.6 (2012): 228-233. Web.