

# Fertility NEWS

12<sup>th</sup> May, 2019

## Sleep disturbances may be associated with impaired fertility

“ Should we be checking on sleep pattern for fertility assessment ? ”

**INTRODUCTION:** Poor sleep health is a risk factor for a host of adverse health outcomes including obesity, type 2 diabetes, cardiovascular disease, depression and all-cause mortality. In reproductive epidemiology disrupted sleep patterns have been linked to a higher risk of adverse pregnancy outcomes such as gestational diabetes, stillbirth, preterm birth and low birth weight. New evidence has emerged that sleep disturbances may be associated with impaired fertility in women. Wise LA et al.<sup>1</sup> reported short sleep duration in men was associated with reduced fecundability. Identifying modifiable determinants of infertility could provide alternatives to expensive fertility workups and treatments.

**SUMMARY:** Gaskins AJ<sup>2</sup> recently (2019) found association between short sleep duration (e.g., sleeping <6 hours compared with sleeping 8 hours) and lower fecundability, a fairly robust relationship between troubled sleep and lower fecundability. The cumulative probability of pregnancy at 12 months was 64% for women with trouble in sleeping more than 50% of the time compared with 76% among women with no trouble in sleeping. However, this association was largely attenuated with additional adjustment for male partner sleep duration and when restricted to nulliparous women. 20% of women in this cohort reported troubled sleep more than 50% of the time, so not a rare exposure. According to this study, women who had troubled sleep more than 50% of the time were of lower socioeconomic status, were more likely to be from minority group and had higher levels of depression and perceived stress compared with women with no trouble sleeping. This then leads to the question of whether improving sleep could be used as an option to buffer against the adverse effects of other risk factors for delayed time to pregnancy such as depression, anxiety or low socioeconomic status. There are also systematic biases in the way that sleep is self-reported within certain subgroups, such as people with depression or obesity, who feel tired and may suspect they sleep less than the norm, regardless of their actual measured sleep. Therefore, further studies where more objective measures of sleep quality through actigraphs or more rigorous standardized measures is recommended.

**CONCLUSION:** From a clinical perspective, treatment of disordered sleeping would not only enhance the quality of life, but also may represent a modifiable pathway for enhancing spontaneous fertility. This article has a fascinating first look at the association between sleep health in women and time to pregnancy, it is the first longitudinal studies to enhance our knowledge on this topic further. Given the growing trend in recognizing sleep disorders and sleep deprivation as an unmet public health problem, particularly among young women, clinicians and researchers alike should be encouraged to collect information on sleep habits and consider it as one of many important factors, in addition to a healthy diet and active lifestyle, in increasing wellness and potentially fertility in women.

### REFERENCES:

1. Wise L.A., Rothman K.J., Wesselink A.K., Mikkelsen E.M., Sorensen H.T., McKinnon C.J., Hatch E.E. 2018. Male sleep duration and fecundability in a North American preconception cohort study. *Fertility and Sterility*, 109 (3), pp. 453-459.
2. Gaskins A.J. Poor sleep and delayed time to pregnancy: a wake-up call for physicians and researchers? (2019). *Fertility and Sterility*, Available online from :<https://doi.org/10.1016/j.fertnstert.2019.02.125>



**Dr Gouri Devi**  
President



**Dr Pankaj Talwar**  
Secretary General



**Compiled by :**  
Date : 12<sup>th</sup> May, 2019

Organised by



Theme: Beyond Tomorrow

15th Annual Congress of  
Indian Fertility Society  
**FERTIVISION**  
2019 6-8 December  
The Leela Ambience Hotel, Gurugram  
New Delhi | India



[www.fertivision2019.com](http://www.fertivision2019.com)