## Frequency of the Obstructive Sleep Apnea symptoms among men with fertility disorders referring to the Caucasus infertility center in Ardabil during 2019 to 2020

## Abstract

**Background:** Infertility is defined as the failure to achieve a clinical pregnancy after 1 year of regular unprotected sexual intercourse. For many couples, it is a crisis and the cause of psychological stress. According to the studies has been done on animals, the reseachers found the obstructive sleep apnea has an effect on sperm quality.

*Aim:*The present study aimed at investigating the frequency of the obstructive sleep apnea symptoms in men with fertility disorders referring to the Caucasus infertility center in Ardabil during 2019 to 2020.

Matherials and Methods: We performed a cross sectional study, screening 100 men with infertility disorders to determine the frequency of obstructive sleep apnea symptoms based on the Berlin questionnaire. Convenience sampling methods were used and divided into two groups of high risk and low risk of obstructive sleep apnea. The data were collected using demographic and Berlin questionnaires and were analyzed with Spss software.

**Results:** The frequency of snoring and daytime sleepiness in infertile men with the high risk of the obstructive sleep apnea was 100% and 44.4%, respectively, and in men with infertility disorders was 46% and 33%, respectively. Among men who snored, those at high risk for obstructive sleep apnea showed a further decrease in total sperm count, progressive sperm motility and normal sperm morphology than those at low risk for obstructive sleep apnea.

*Conclusion:* Frequency of symptoms and risk of OSA are noticeable so that they can affect on sperm parameters.

Keywords: obstruvtive sleep apnea, snoring, daytime sleepiness, male infertility.