



GENDER DIFFERENCES IN SELF-REPORTED SLEEP QUALITY AMONG SARCOIDOSIS PATIENTS: ONLINE SURVEY RESULTS

SALAI G.¹, Kovačević I.¹, Malnar Janeš L.¹, Marasović I.¹, Ranilović D.¹, Vukoja D.¹, Zelenika Margeta M.¹, Huljev Šipoš I.¹, Tekavec-Trkanjec J.¹, Ljubičić Đ.^{1,2}

¹ Dubrava University Hospital, Zagreb, Croatia
Department of Pulmonology

² University of Zagreb, Zagreb, Croatia
School of Medicine

Objective:

Sarcoidosis is a multisystem granulomatous disorder of unknown etiology. Fatigue and malaise are commonly reported among the affected individuals. Differences in sleeping patterns between genders are an emerging topic in sleep research. We aimed to investigate the differences in self-reported quality of sleep between male and female sarcoidosis patients.

Methods:

We conducted an online self-administered survey which was posted in a Croatian-speaking patient-support Facebook group ("Sarkoidoza - bolest snježne pahulje"). The survey asked



about general patients' demographic data, clinical and laboratory parameters which were deemed likely to be known by patients themselves, as well as questions regarding sleep quality. Additionally, questions from Epworth Sleepiness Scale(ESS) and Pittsburgh Sleep Quality Index(PSQI) were asked. PSQI is a standardized questionnaire comprised of seven components assessing different aspects of sleep quality; each component is scored between 0(no difficulty) to 3(severe difficulty).

Parametric variables were reported as mean ($\pm$ standard deviation) and were analyzed using an independent samples T-test; non-parametric variables were reported as median (1st - 3rd quartile) and were analyzed using a Kruskal-Wallis test. Type one error was set at 0.05.

Result:

N=58 self-reported sarcoidosis patients decided to participate, out of which the majority were women (N=46, 79.3%). The mean age was 46.8($\pm$ 9.6) years. There was no statistically significant difference in the mean ESS score between women and men (7.65 ($\pm$ 4.13) vs. 10.08($\pm$ 6.05), respectively;p=0.07).

The difference in the global PSQI score also had no statistically significant difference between the genders (9.41($\pm$ 3.58) in women vs. 7($\pm$ 4.9) for men). However, when PSQI was analyzed for each of the seven components, women reported more difficulty in the "sleep latency component" (2(1-2) vs. 1(0-2), p=0.047).



Furthermore, there was a major difference in the "use of sleep medication" component. Namely, women had a significantly higher score, with a median of 1 (0-3), whereas men had a score of 0(0-0), $p=0.005$. Namely, 26% of women (0 men) reported using sleep medications three or more times per week in the previous month. 34% of women (16% of men) used sleep medications periodically, and 39% (84% of men) did not use sleep medications in the previous month.

Conclusion:

Our results indicate that female sarcoidosis patients might have more difficulty in falling asleep and are more likely to require sleep medications. It is important to note that these results are based on a self-reported online survey, which is inherently prone to several sources of bias. Systematic observational studies are required to accurately assess these findings.