

## **Evaluation of sleep quality in patient with multiple sclerosis referred to the neurology clinic of Alavi hospital in Ardabil**

### **Abstract**

**Background and objective:** Recent studies have shown that people with multiple sclerosis are at increased risk of sleep disorders. The aim of this study was to evaluate the sleep quality in patient with multiple sclerosis referred to the neurology clinic of Alavi hospital in Ardabil.

**Methods:** In this case-control study, 110 patients with MS and 110 healthy subjects as control group were evaluated in terms of sleep quality using Pittsburgh Sleep Quality Index (PSQI).

**Results:** The gender composition was 26.4% males and 73.6% females in MS group and 25.5% males and 74.5% females in control group. The mean age of patients in MS and control groups was  $35.5 \pm 9.3$  and  $35.8 \pm 9.9$  years old, respectively ( $P = 0.790$ ). The total score of MS patients in PSQI was significantly higher than that of the control group ( $7.32 \pm 2.78$  vs.  $5.3 \pm 2.0$  and  $P < 0.0001$ ). Also, scores of patients with MS was significantly higher than that of the control group in subscales including Sleep latency ( $1.14 \pm 0.99$  versus  $0.85 \pm 0.91$  and  $P = 0.029$ ), Sleep duration ( $1.09 \pm 0.8$ )  $0.83 \pm 0.88$  and  $P = 0.048$ ), Habitual sleep efficiency ( $1.15 \pm 0.92$  vs.  $0.85 \pm 0.83$  and  $P = 0.017$ ), Sleep disturbance ( $\pm 0.96$ )  $0.51 \pm 0.88$  and  $P = 0.013$ ), Use of sleep medication ( $0.69 \pm 0.94$  versus  $0.33 \pm 0.65$  and  $P = 0.001$ ), and Daytime dysfunction ( $0.88 \pm 0.93$  vs.  $32.2 \pm 0.69$  and  $P < 0.0001$ ).

**Conclusion:** The findings of this study showed that compared with the normal population, MS patients have a significantly lower sleep quality. Because poor sleep quality can be associated with other problems such as fatigue, depression, pain, and physical disability, and it can have a negative effect on daily activities and social communication of these patients and generally reduce their quality of life, screening of MS patients in terms of sleep quality and management of sleep disorders can help to reduce some side problems of these patients and improve their quality of life.

**Key Words:** Sleep quality, Multiple Sclerosis, Pittsburgh Sleep Quality Index.