

Nocturia: a bothersome urological symptom in the elderly

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Dear editor

We read with great interest the valuable study by Shao et al,¹ which has been recently published in *Clinical Interventions in Aging*. The authors mentioned the nocturia as a negative factor, leading to a problem in the sleep status and the daily function of the patients who suffer from lower urinary tract symptoms. For assessment of sleep quality and daytime dysfunction, Shao et al used the “Pittsburgh Sleep Quality Index” and “Epworth Sleepiness Scale,” however, other instruments such as “Insomnia Severity Index” and “Medical Outcomes Study Sleep Scale” also could be used which have high validity and reliability.²⁻⁴ There are not any precise studies using the “Insomnia Severity Index” and the “Medical Outcomes Study Sleep Scale” to evaluate the effects of nocturia on sleep status of patients with lower urinary tract symptom and further surveys are needed in this regard. Also, it was stated that sleep quality of female patients was poorer than that of male patients based on Pittsburgh Sleep Quality Index score.¹ This can be explained by the mental and psychiatric disorders associated with the perimenopause and postmenopause,^{5,6} considering that the age range of females was mainly in the climacteric period. Of course, the exclusion criteria of the study contained only a history of urological treatment and did not include the antipsychotic medications or diuretic usage, which can potentially confound the study outcomes.

Nocturia as a bothersome urological symptom has other adverse effects in addition to those discussed in Shao et al’s article, especially for the elderly patients. It has been demonstrated that nocturia is associated with falls in the aged patients.⁷ Also, it has been reported in a study that nocturia-related falls are associated with a 2.2 increased risk of bone fractures such as hip and arm.⁸ In the given survey, it was also declared that the rate of death in the patients with nocturia (defined as having >1 void per night) is about 2 times more than in those without nocturia. Another investigation revealed that the individuals with nocturia-related falls are 1.5 times more at risk of long-term mortality compared to non-fallers.⁹ According to the mentioned results, it is therefore necessary to study such serious consequences of nocturia, especially in the elderly patients who suffer from lower urinary tract symptom, considering that there is not any research in relation to it.

Disclosure

The authors report no conflicts of interest in this communication.

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Author's reply

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Dear editor

Thank you very much for sharing such valuable letter regarding to our published article and giving us opportunity to share our response letter.

As Bahram Shekarchi and Mohammad Zamani said, there exist a great impact on elderly patients with nocturia,

including life quality, further medical issues, or even mortality. The impact also exists among the patients with lower urinary tract symptoms.

“Insomnia Severity Index” and “Medical Outcomes Study Sleep Scale” are both also great instruments to evaluate our patients’ sleep quality. In our published work, we used the “Pittsburgh Sleep Quality Index” and “Epworth Sleepiness Scale” because they are widely used among our clinical practice. The Pittsburgh Sleep Quality Index focuses on different aspect of sleep quality including sleep latency, sleep duration, sleep efficiency, sleep disturbance, sleep medication use, and daytime dysfunction due to sleepiness. The Epworth Sleepiness Scale gives more detailed information on general daytime dysfunction. We have utilized these instruments to evaluate one’s life quality during day and night respectively. However, because there are only few studies referring to this issue, more instruments or tools could be used.

Indeed, there are plenty of medical and psychological issues affecting sleep quality and daytime dysfunction including climacteric period or medication usage as mentioned by Bahram Shekarchi and Mohammad Zamani. We should design a more thorough study in the near future.

Disclosure

The authors report no conflicts of interest in this communication.

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