

28th ECSS Anniversary Congress, Paris/France, 4-7 July 2023

KNOWLEDGE ABOUT SLEEP HYGIENE AND SLEEP BEHAVIORS OF PARALYMPIC ATHLETES: TOKYO 2020 PARALYMPIC GAMES

Mello, M.T., Grade, I., Maculano, A.E., Lira, F., Padilha, C.S., Stieler, E., Brandt, V., Silva, S., Lourenço, T., Silva, A.

Universidade Federal de Minas Gerais; Comitê Paralímpico Brasileiro

INTRODUCTION:

Paralympic athletes have a high rate of sleep complaints, poor sleep quality, excessive daytime sleepiness, and acute or chronic sleep restriction (1). Sleep disorders in this population have been associated with the occurrence and severity of health problems (2). Sleep hygiene strategies (SHS), such as counseling on behaviors, lifestyle, and environmental factors that can positively influence sleep (3), and improving sleep quality is associated with better sports performance. Therefore, our objective was to evaluate the knowledge about sleep hygiene and the sleep behaviors practiced by medalist and non-medalist para-athletes at the Tokyo 2020 Paralympic Games.

METHODS:

This is a cross-sectional study with 98 Paralympic athletes, who represent 52% of the paralympic athletes summoned by the Brazilian Paralympic Committee. Among them, 30 won a medal at the Paralympic Games. All had physical-motor disabilities, and competed in athletics (n = 34), sitting volleyball (n = 26), swimming (n = 14), wheelchair tennis (n = 6), table tennis (n = 8), and bocce (n = 8). =7), fencing (n = 2), and parataekwondo (n = 1). Through an online form, they answered the Sleep Beliefs Scale, the Athletes Sleep Behavior Questionnaire, and a structured questionnaire to investigate the frequency of SHS one month before the trip to the Tokyo 2020 Paralympic Games.

RESULTS:

Paralympic athletes had low global knowledge about SHS (57% correct answers), as well as low knowledge about behaviors incompatible with sleep (68%), sleep-wake cycle behaviors (54%), thoughts and attitudes related to sleep (50%), and high frequency of maladaptive sleep behaviors (48.7 ± 5.9). 26% of Paralympic athletes consider SHS necessary, and the frequency of the technical committee encouraging SHS was significantly higher among medalist Paralympic athletes compared to non-medalists (29% vs. 13%, $p = 0.04$).

CONCLUSION:

Paralympic athletes had low knowledge about SH, a high frequency of behaviors negatively influencing sleep, and few considered SH important. In addition, medalist para-athletes had more significant SHS incentives when compared to non-medalists. This way, technical committee members can combat behaviors negatively influencing sleep through SHS.

REFERENCES

- 1) Grade I, et al. The Sleep Parameters of Paralympic Athletes: Characteristics and Assessment Instruments. *J Sport Rehabil.* 2022;1(1):1–22.
- 2) Silva A, et al. Sleep in Paralympic athletes and its relationship with injuries and illnesses. *Phys Ther Sport.* 2022;56(6):64–31.
- 3) Halson SL, et al. Sleep in elite athletes and nutritional interventions to enhance sleep. *Sports Med.* 2014;44(1):13-23.

Funding: This work was supported by the Pro-Reitoria de Pesquisa da Universidade Federal de Minas Gerais (PRPQ/UFMG), Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq), Fundação de Amparo à Pesquisa do Estado de Minas Gerais (FAPEMIG), Comitê Paralímpico Brasileiro (CPB), Centro de Estudos em Psicobiologia e Exercício (CEPE).

Topic: Disabilities

Presentation E-poster

