

Protocol in Paralympic Sports (PLEEP) questionnaire was used to collect information on injury diagnoses, which were obtained from the medical department during the championship. A quantitative analysis of the data was performed using descriptive statistics.

Results: Fifty wheelchair fencing athletes participated in this study, 56% male and 44% female, with a mean age of 30.92 (± 11.14) years. Regarding the functional categories of the athletes, 62% were in category A and 36% in category B. During the championship, 16 injuries were recorded, 62.5% of which were in the upper limbs. The diagnoses of injuries included effort-induced muscle disorder (43.75%), contusion (25%), blister (18.75%), and abrasion (12.5%). Regarding the risk factors related to the diagnoses, it was observed that 25% of the effort-induced disorders were associated with repetitive movements with the armed arm, and 18.75% with movements specific to the modality. For bruises, 12.5% were related to blows with the tip or blade of the combat weapon and 12.5% to the transfer of the wheelchair. Regarding blisters, 12.5% were associated with the use of protective equipment (gloves) and 6.25% to the use of the combat wheelchair (holding the support bar during combat). Abrasions were related to blows with the tip or blade of the combat weapon (12.5%).

Conclusion: The results of this study indicate that the upper limbs are the most affected region by injuries among wheelchair fencing para-athletes, with exercise-induced disorder being the most frequent diagnosis. Risk factors such as repetitive and modality-specific movements were frequently associated with these injuries.

Implications: The identification of the types of injuries and their risk factors contributes to the identification of modality-specific prevention demands, providing greater safety in the practice of sports by para-athletes.

Keywords: Athlete Injuries, Epidemiology, Wheelchair Fencing

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ASSOCIATION BETWEEN SLEEP QUALITY AND THE UPPER LIMB ROTATION TEST PERFORMANCE IN SWIMMERS

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Background: Sleep plays an important role in physiological and psychological well-being. Poor sleep quality can impair competitive performance through, increase injury rates and reduced training efficiency. On the other hand, high-quality sleep before a competition can enhance performance and optimize results. Despite these findings, the literature has yet to explore whether sleep quality is related to performance in tests such as the Upper Limb Rotation Test (ULRT).

Objectives: To analyze the association between sleep quality and physical performance in the ULRT among swimmers.

Methods: This was a cross-sectional study. This study was approved by Ethics Research Committee. The sample included swimmers of both sexes, aged between 12 and 60 years, with more than one year

of experience in the sport, training at least three times per week, and actively participating in competitions. Sleep quality was assessed using the Brazilian version of the Pittsburgh Sleep Quality Index (PSQI), a valid and reliable 10-item instrument. Upper limb physical performance was evaluated using the ULRT. The test was performed with athletes in an elbow plank position, with the shoulder, epicondyle, greater trochanter, and lateral malleolus touching a wall. They executed trunk rotations combined with external shoulder rotation at 90° of abduction, aiming to touch a mat on the wall as quickly as possible within 15 seconds. Three attempts were performed, with a 45-second rest between trials, the number of repetitions was recorded as the score, and the mean of three trials was considered for analysis. Data analysis was conducted using Jamovi software. Univariate linear regression was performed to assess the association between sleep quality and the Upper Limb Rotation Test (ULRT).

Results: A total of 53 swimmers were included, with an average of 7.0 $\pm$ 6.36 years of sports practice and a mean age of 30.2 $\pm$ 14.4 years, of whom 23 (45.1%) were female. Performance in the ULRT showed no significant association with sleep quality ($p > 0.05$). Additionally, sleep quality explained less than 21% of the performance variation for both the dominant and non-dominant limbs.

Conclusion: The findings suggested that sleep quality, assessed with the PSQI, was not associated with ULRT performance in swimmers. Future studies should consider different approaches to analyzing sleep quality, as well as incorporating physiological and psychological factors, to better understand the relationship between sleep and functional performance.

Implications: The sleep quality, assessed with PSQI, did not have a significant impact on ULRT performance.

Keywords: Physical performance tests, functional tests, sleep disorders

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INFLUENCE OF CATEGORY AND BIOLOGICAL SEX ON THE LEVEL OF PAIN CATASTROPHIZING IN SWIMMING ATHLETES

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Background: Pain catastrophizing, an exaggerated tendency to anticipate and amplify painful sensations, is a critical factor in the evaluation and treatment of athletes. The Pain Catastrophizing Scale (PCS) is a self-assessment questionnaire, consisting of 13 statements that assess thoughts and feelings related to pain. In the context of swimming, a high-performance sport, understanding the differences in pain catastrophizing between age and sex categories can provide information about each individual's perception of pain. This study aims to explore how these factors influence the level of sleep catastrophizing in athletes.

Objectives: To characterize the level of catastrophizing in swimming athletes and analyze the association of category and sex with the level of pain catastrophizing in swimming athletes.