

Profile of Pre-Practice Hydration Status of Indonesian Junior Sub-Elite Karate Athletes

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ABSTRACT

Background. Karate is high intensity sport which tends to cause dehydration. The purpose of this study was to identify pre-practice hydration status of Indonesian junior sub-elite karate athletes.

Methods. This descriptive cross-sectional research recruited junior (*under-17*) sub-elite karate athletes in Yogyakarta, Indonesia. Eleven subjects participated in this study (6 male; 5 female, age 14.09 ± 2.34 y.o, weight 50.14 ± 10.85 kg, height 1.55 ± 0.11 m, BMI 20.65 ± 2.03 kg/m²). Hydration status was checked by urine specific gravity (USG) using urine strip test 15-30 minutes before training started. The values of USG were compared with the reference value to categorize the hydration status into *good hydration* (USG < 1.010), *minimal dehydration* (1.010 – 1.020) and *significant dehydration* (1.021 – 1.030).

Results. The study showed that 90.9% (n = 10) of the subjects suffered from dehydration and 10.1% (n=1) had good hydration before training. Six from 10 dehydration athletes (60%) were categorized into minimal dehydration and the rest (40%; n = 4) were significant dehydration.

Conclusion. Incidence of pre-practice dehydration among junior sub-elite karate athletes in Indonesia was high. Education and promotive strategy are needed to prevent the risk of dehydration during exercise.

Kata Kunci: *dehydration, karate, sub-elite, junior, indonesia.*