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Rates of injuries in martial arts and combat sports on the example of two taekwon-do styles

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Abstract

Background and Study Aim. The objective of this study was to describe the characteristics and rates of injuries during the martial arts, self-defense and combat sports competitions on the example of two types of taekwon-do: ITF and WTF.

Materials and Methods. Different kinds of sports competitions in which 4000 competitors participated and were exposed to injuries, have been examined. The records of 15 medical reports from ITF competitions in Poland and scientific studies (taekwondo WTF) have been used in this research. The rate of injuries was calculated by means of the following formula: # of injuries / # of athletes exposed to injury x 1000 = # of injuries per 1000 athletes exposed to injury (A-E).

Results. The average rate of injuries during ITF taekwon-do competitions was 111.6/1000 A-E (95%CI 91.8-131.3), however, for WTF it was (men and women) 82.8/1000 A-E (95%CI 76.3-89.3) and 87.0/1000 A-E (95%CI 76.8-97.2). A bigger number of injuries occurred during ITF junior competitions 117.7/1000 A-E (95%CI 106.6-128.8). When compared to other sports disciplines, the injuries rates in both taekwon-do styles were on an average level.

Conclusions. The age and the level of influence on the number of injuries during competitions, however, the power of punches and kicks limited by competition regulations does not decide about the rate of injuries. There is no homogenous method of recording and assessment of injuries in martial arts and combat sports.

Key words: Rates of injuries • ITF taekwon-do • WTF taekwondo

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