

SWIMMING INJURIES AND THEIR RISK FACTORS AMONG IRANIAN ELITE FREESTYLE AND BUTTERFLY SWIMMERS

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(Received April 6, 2012, accepted May 14, 2012)

ABSTRACT

The purpose of the study was to find out the swimming injuries and their risk factors among Iranian elite freestyle and butterfly swimmers. This hypothesis was tested on a group of 89 Iranian elite freestyle and butterfly swimmers, with at least three years background. The subject's age ranged between 15-24 years, who participated in National swimming championships. The researcher collected information through interviews and by using self-made questionnaire to elicit the data and designed test retest reliability coefficient of this 0.84 significant level ($P < 0.05$) was performed. After data collection, descriptive and inferential statistical were analyzed by software SPSS17. Insufficient warm up before training or competition, wrong technique, lack of adequate physical fitness, wrong exercise and less scientific principles of exercise, poor conditions of swimming pool for training were the highest causes of injuries. There was no significant difference found among the kind of injuries in head and face, trunk and vertebral column, lower limb, joint, bone and each type of swimming ($P < 0.05$). There was a significant difference found among the kind of injuries in upper limbs, skin, muscle - tendon, infection, sensitivity and each type of swimming ($P < 0.05$). Elite swimmers may train more than eight thousand meters a day, putting joints through extreme repetitive motion. Most swimming injuries affect the shoulders, knees, hips, or back, depending on stroke. Overuse of muscles causes fatigue and failure to adhere to proper stroke techniques. Other repetitive injuries include inner back problems, and back injuries from dolphin kicks or dry-land cross-training.