Actualization of a unified approach to the assessment of injuries in martial arts in the aspect of theoretical analysis of sports practice in Iran

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Abstract

Objective of the study was to actualize the problem of injuries in martial arts and develop a unified approach to systematizing sports injuries and assessing their severity based on the analysis of Iranian scientific literature.

Methods and structure of the study. The work used the method of content analysis of scientific sources published from 2003 to the present, which were conducted in the field of studying the prevalence of injuries or risk factors for injury in Iranian martial artists. In this study, related articles were searched using keywords and specialized databases such as Google Scholar, Sciencedirect, PubMed, SID, Magiran and Irandoc.

Results and conclusions. It has been established that there are actual differences in approaches and methods for assessing the severity of injuries and the localization of these injuries in sports practice in different countries. One of the distinctive reasons is that there are no strict standards and unified methods for determining injury in the sports listed above. Another reason is the obvious differences in the use of terminology to refer to and explain types of injuries, which makes it difficult to generalize the results because the terms and words are not identical.

The authors conclude that the development of a unified approach to assessing injuries and ways to prevent them in martial arts will help achieve a high level of competence of coaches in teaching athletes technical techniques and will reduce the degree of injuries in martial arts.

Keywords: sports injuries, kickboxing, martial arts, karate, kung fu, judo, limb injury.

Introduction. In recent years, there has been a significant increase in the number of people interested in practicing combat sports. More than 75 million teenagers around the world participate in these sports activities. Women are also actively involved in martial arts [1, 2].

Along with the popularity of combat sports, the number of injuries is increasing, which represents a pressing scientific and practical problem.

As an analysis of scientific works in the field of sports injuries shows, the attention of scientists and practitioners focuses on epidemiological studies, as well as on identifying risk factors and mechanisms of injury. While a poorly studied area remains the development of unified approaches to defining injuries and assessing the degree of their severity, as well as developing measures aimed at reducing injuries in martial arts [8, 21]. Considering this issue, future research should attempt to find injury prevention strategies and interventions to control risk factors and mechanisms of injury in martial artists [25].

Objective of the study was to actualize the problem of injuries in martial arts and develop a unified approach to systematizing sports injuries and assessing their severity based on the analysis of Iranian scientific literature. **Methods and structure of the study.** The work used the method of content analysis of scientific sources published from 2003 to the present, which were conducted in the field of studying the prevalence of injuries or risk factors for injury in Iranian martial artists. In this study, related articles were searched using keywords and specialized databases such as Google Scholar, Sciencedirect, PubMed, SID, Magiran and Irandoc.

The criteria for participation in the study for the selected articles were as follows:

1. Articles must be in Persian or English.

2. Articles must be published in scientific research publications.

3. Articles about combat sports (including boxing, karate, kickboxing, taekwondo, judo, kung fu, wushu and jiu-jitsu).

The criteria for studying the articles were the following parameters: prevalence rate of injuries, location of injury, time of injury (training or competition), severity of injury, type of injury, cause and mechanism of injury, risk factors, season of injury, injury prevention protocols [6, 14, 24].

As a result of the analysis of articles according to specific criteria, 26 articles were selected.

Results of the study and discussion. According to the analysis of scientific and methodological literature, it turned out that the structure of injuries received during training and competitive activity in Iran and other countries is similar [20]. The most common types of injuries are minor. In karate, the greatest number of injuries occurs in the head and neck area, and in kickboxing and judo - in the lower part of the body and are mainly bruises and bruises [10-13, 17]. Most injuries occur due to technical errors during training [12, 22]. In this regard, it appears that the role of coaches in preventing injury to martial artists is very important. Additionally, little attention has been paid to gender differences in martial arts.

When studying the sources, it was revealed that there are significant differences in approaches and methods for assessing the severity of injuries and the localization of these injuries in sports practice in different countries [23].

One of the reasons is that there are no strict standards and unified methods for determining injury in the sports listed above. Some sources list injuries to the upper body without specifying the specific area injured. In the analyzed sources there is no clear description of the injury, the nature of the injury, rehabilitation and recovery of the injuries. Analyzing the sources, it can be assumed that injuries can be repeated, and information about them is missing or not properly recorded [3, 5, 9, 26]. The mechanism of injury is not objectively and fully described, and therefore the distribution of injuries into certain subgroups is difficult [16-19].

Another reason is the obvious differences in the use of various terms and words to refer to types of damage, which makes it difficult to generalize the results because the terms and words are not identical. Scientists and specialists use different approaches to define injuries, damage area, injury mechanisms and their assessment. On this basis, there is a need for theoretical and methodological substantiation of the characteristics of the concepts used in these sports.

Conclusions. Developing a unified approach to assessing injuries and ways to prevent them in martial arts will help achieve a high level of competence of coaches in teaching athletes techniques and will help reduce the degree of injuries in martial arts.

According to Iranian scholars and experts, given that hitting the opponent's body is considered a bonus in martial arts, and that strikes to the upper body and head have more points, it seems that a review of the rules of martial arts and studying their impact in future studies is a smart step that can be taken to reduce injury statistics in these sports.

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