



Role of rapid response factors to injuries in basketball players studying at russian universities

UDC 796.323.3



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Received by the editorial office on 29.11.2023

Abstract

Objective of the study was to identify factors that have a significant impact on student basketball players making emergency decisions when injuries occur.

Methods and structure of the study. During the analysis of scientific and methodological literature, 4 management factors of rapid response to injuries among basketball players classified as the first level were identified. In turn, each of the factors (university administration, coach, athlete, parents) is characterized by different types of management decisions in the event of injuries that were classified as the second level. The experts were asked to rate the importance of each first-level factor on a scale from 1 to 5 (1 – insignificant, 5 – very important).

Results and conclusions. Coach level and athlete level were found to be the most important, followed by university and parent levels. Therefore, the main efforts aimed at preventing injuries must be implemented at the level of athletes and coaches. First of all, they should be aimed at increasing the awareness of athletes and coaches in the means and methods of preventing emergency situations, as well as ensuring the neuropsychic stability that is necessary when making decisions if they arise.

Keywords: *basketball players, sports injuries, factors influencing emergency decision making, coach level, athlete level, university level, parent level.*

Introduction. Basketball is a sport that is accompanied by a high load on the musculoskeletal system and the functional system of athletes. Frequent jumping and collisions as a result of fighting for the ball can lead to injury [1, 2]. The athlete's future performance depends on how effective recovery procedures are after injury. Studying the role of factors influencing decision-making in emergency situations (in case of injury) may be an important step towards reducing the risk of injury among basketball players on university teams.

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sity administration, coach, athlete, parents) is characterized by different types of management decisions in the event of injuries that were classified as the second level (Table 2) [3-6].

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Results of the study and discussion. Expert assessment showed that “coach level” and “athlete level” are important factors in making emergency decisions when student basketball players are injured (Table 1, Fig. 1).

Factor analysis made it possible to determine the weighting coefficients of the factors (Fig. 2).

The weighting coefficient at the athlete and coach level is 0.2632. To make emergency decisions in an injury situation, coaches and athletes are the most important links. When considering injuries to basketball players, athletes and coaches themselves must

Table 1. Assessment of the significance of first-level factors in making emergency decisions in case of injuries among basketball players of Russian universities

Levels/Experts	E1	E2	E3	E4	E5	σ	General assessment	Ratio
University level	5	5	5	5	4	0,4472	24	0,96
Trainer level	5	5	5	5	5	0	25	1
Athlete level	5	5	5	5	5	0	25	1
Parent level	4	4	5	5	3	0,8366	21	0,84

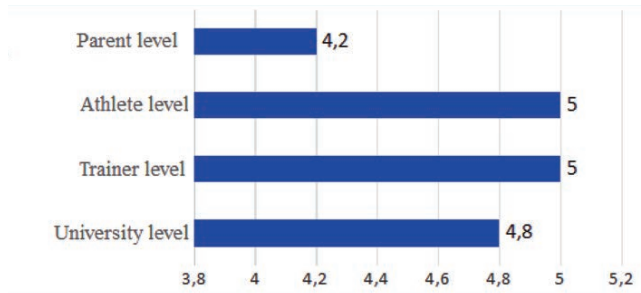


Figure 1. Average value of first-level factors in making emergency decisions in case of injuries among Russian university basketball players

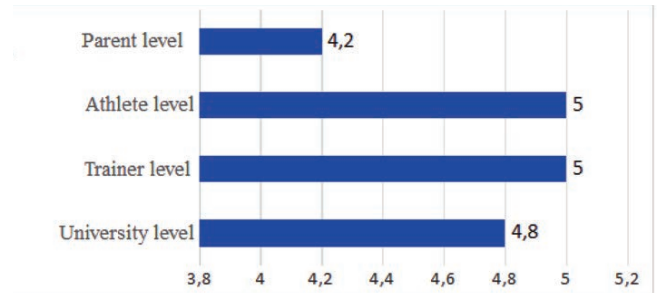


Figure 2. Weighting coefficients of first-level factors in making emergency decisions in case of injuries among basketball players of Russian universities

first make scientific and informed decisions in order to effectively prevent the occurrence of injuries and be able to effectively deal with their consequences.

The outcome of an emergency situation depends on their actions, which means it is necessary to pro-

vide both coaches and athletes with knowledge and skills aimed at preventing such situations, as well as ensuring the neuropsychic stability that is necessary when making decisions. The coach must have not only methodological literacy, but also knowledge in

Table 2. Assessment of the significance of second-level factors in making emergency decisions in case of injuries among basketball players of Russian universities

First level factors	Second level factors	General assessment	Correlation with maximum score	σ , standard deviation	Average value
University level	The degree of perfection of the university decision-making system in the situation of injury	24	0,96	0,4472	4,8
	Management decisions made by the university	21	0,84	0,4472	4,2
	Conduct of the university management when dealing with incidents	19	0,76	0,4472	3,8
	University management's attitude towards work	25	1	0	5
Trainer level	Availability of a specialist in injury prevention in team sports	6	0,24	1,6431	1,2
	Responsibility for the team	23	0,92	0,8944	4,6
	Knowledge of sports injuries	25	1	0	5
	Methodological literacy	25	1	0	5
Athlete level	Healthy behavior and life safety	25	1	0	5
	Ability to prevent injuries	23	0,92	0,5477	4,6
	Ability to cope with stress	19	0,76	0,8366	3,8
	General health level	25	1	0	5
Parent level	Cooperation and coordination	15	0,6	0	3
	Loss of interest	11	0,44	1,0954	2,2
	Awareness of responsibility for sports injuries	23	0,92	0,8944	4,6
	Emotional reaction	19	0,76	0,4472	3,8



the field of sports injuries, which will allow him to adjust the training program in such a way as to minimize the negative impact on the athlete. The athlete, in turn, must have both good health and the ability to ensure his own safety in training and game situations.

The weighting factor at the university level is 0.2525. The university can provide equipped training grounds with good coverage, ventilation, sufficient lighting, etc. to minimize the possibility of injury due to the environment. It is also within the power of a higher educational institution to provide medical equipment and a sports doctor so that athletes have the opportunity to receive effective treatment if injuries occur.

Finally, the weight at the parent level is 0.2211. It is the parents who provide the appropriate conditions for the athlete to quickly recover from injury.

As a result of determining the significance of second-level factors in making emergency decisions in case of injuries among basketball players, it was found that "the presence of a specialist in the prevention of injuries in team sports" (coach level) and "loss of interest" (parental level) are the least important (Table 2).

Table 3 presents the final list of significant factors of the second level, grouped by factors of the first level.

The average values and weighting coefficients of second-level factors in making emergency decisions in case of injuries among Russian university basketball players are presented in Table 4.

Decision-making in emergency situations at the university level is largely dependent on the leadership position and includes four components: the degree of sophistication of the university's decision-

Table 3. Summary table of first and second level factors in making emergency decisions in case of injuries among basketball players of Russian universities

First level factors	Second level factors
University level	The degree of perfection of the university decision-making system in the situation of injury
	Management decisions made by the university
	Conduct of the university management when dealing with incidents
	University management's attitude towards work
Trainer level	Responsibility for the team
	Knowledge of sports injuries
	Methodological literacy
Athlete level	Healthy behavior and life safety
	Ability to prevent injuries
	Ability to cope with stress
	General health level
Parent level	Cooperation and coordination
	Awareness of responsibility for sports injuries
	Emotional reaction

Table 4. Average values and weighting coefficients of second-level factors in making emergency decisions in the event of injuries to basketball players at Russian universities

First level factors	Second level factors	Average value	Weight coefficient
University level	The degree of perfection of the university decision-making system in the situation of injury	4,8	0,2697
	Management decisions made by the university	4,2	0,2359
	Conduct of the university management when dealing with incidents	3,8	0,2135
	University management's attitude towards work	5	0,2809
Trainer level	Responsibility for the team	4,6	0,315
	Knowledge of sports injuries	5	0,3425
	Methodological literacy	5	0,3425
Athlete level	Healthy behavior and life safety	5	0,2717
	Ability to prevent injuries	4,6	0,2501
	Ability to cope with stress	3,8	0,2065
	General health level	5	0,2717
Parent level	Cooperation and coordination	3	0,2632
	Awareness of responsibility for sports injuries	4,6	0,4035
	Emotional reaction	3,8	0,3333



making system in an injury situation; management decisions made by the university; the behavior of university management in handling incidents; attitude of university management towards work. "University Management Work Attitude" has the highest weighting, indicating that this indicator is the most important factor in emergency decision making at the university level.

Emergency decision making at the athlete level is based on the knowledge that the injury subject has and includes four components: health behavior and life safety; ability to prevent injuries; ability to cope with stress; general level of health. "Health and Life Safety Behavior" has the highest weighting, indicating that it is the most important aspect of emergency decision making at the athlete level.

When a basketball player gets injured, it is the coach who needs to make the quickest decision. Therefore, at the coach level, there are two equally important indicators: "knowledge in the field of sports injuries" and "methodological literacy."

The parent level mainly involves ensuring the life safety of basketball players during the recovery period, so "cooperation and coordination" has the highest weight at the parent level.

Conclusions. The study identified a system of indicators that reflects the effectiveness of making emergency decisions when student basketball players receive an injury: coach level, athlete level, university level and parent level. At the university level, these are: the degree of perfection of the university decision-making system in a situation of injury; management decisions made by the university; the behavior of university management in handling incidents; attitude of university management towards work. At the coach level: responsibility for the team, knowledge in the field of sports injuries, methodological literacy. At the athlete level: health behavior and life safety, ability to prevent injuries, ability to cope with stress, general level of health. At the parent level: cooperation and co-

ordination, awareness of responsibility for sports injuries, emotional reaction.

The work carried out may be useful for improving the decision-making system in emergency situations (in situations of injury), and will also improve the management aspect in order to minimize the likelihood of athletes getting injured in the future.

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