The Current Situation And Solutions To Prevent Injuries In Physical Training And Sports At The Military Engineering University

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Abstract: Sports injuries are a significant factor affecting training effectiveness, especially in military environments. This article presents the results of a survey on the current state of injuries in physical training activities at the Military Engineering University. It identifies the causes, common types of injuries, and proposes preventive solutions. The research results are based on a survey of 120 trainees and the compilation of practical data.

Keywords: sports injuries, physical training, military, injury prevention,...

Date of Submission: 23-06-2025 Date of Acceptance: 04-07-2025

I. INTRODUCTION:

In the military environment, for trainees, physical training and sports always play a key role in improving health, enhancing endurance, and combat capability for the troops. However, the training process also carries many risks of injury if not organized and supervised properly. The reality at the Military Engineering University shows that there are quite a few cases of trainees suffering injuries during training. Therefore, understanding the causes, common types of injuries, and developing preventive solutions is an urgent requirement, ensuring safety while enhancing training effectiveness. Thus, the article chooses to study "*The current situation and solutions to prevent injuries in physical training and sports at the Military Engineering University*".

Research Methods and Subjects: The study employs methods such as surveys, in-depth interviews, document analysis, and statistical synthesis. The survey subjects consist of 120 trainees currently studying at the Military Engineering University. Additionally, the research team interviewed 10 officials responsible for physical training and military medical care to gather supplementary information and verify the data.

II. RESEARCH RESULTS:

The survey of 120 trainees was conducted using a questionnaire; the content of the questionnaire focused on: situations of injury occurrence, types of injuries, causes, timing of occurrence, and recovery measures. The results obtained are as follows:

2.1. Common Types of Injuries

The survey results show that out of 120 students, 78 have experienced injuries while training for physical fitness or participating in sports. The common types of injuries are presented in Table 1.

Table 1. Caucis Tarticipation in Thysical Activities		
Type of Injury	Number of Students Affected (n)	Percentage (%)
Ankle Sprain	35	29.2
Thigh Muscle Strain	28	23.3
Hamstring Injury	22	18.3
Rotator Cuff Tendinitis	15	12.5
Anterior Cruciate Ligament Tear	12	10.0
Medial Collateral Ligament Injury	8	6.7

Table 1. Cadets' Participation in Physical Activiti	ies
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Chart 1. The rate of common injury types in physical training

2.2. Causes of Injury

Analysis of the survey and interviews indicates several main causes leading to injuries such as:

- Improper warm-up techniques (76.9%)
- Incorrect movement techniques (68.4%)
- Overtraining without adequate rest (64.1%)
- Use of outdated and poor-quality training equipment (53.8%)

2.3. Timing of Injuries

Injuries mainly occur during endurance exercises and high-speed coordination exercises, particularly during the mid-training phase when intensity increases rapidly. Approximately 47% of injuries occur in the afternoon due to hot weather conditions, lack of focus, and decreased physical fitness.

2.4. Measures to Address and Prevent Injuries

Based on the collected data, the study proposes the following solutions:

- Organize training sessions on warm-up and stretching techniques for new trainees.
- Group trainees according to their physical condition.
- Improve training plans, allowing for reasonable rest periods between training cycles.
- Ensure that equipment meets standards and undergoes regular inspections.
- Strengthen coordination between coaches and military medical staff in monitoring injuries.

III. CONCLUSION

Sports injuries in military training at the Military Engineering University occur with a relatively high frequency and diverse forms. The main causes stem from improper techniques, physical overload, and a lack of preventive knowledge. Improving training content, raising awareness, and medical supervision can significantly contribute to reducing injuries and ensuring the long-term quality of training.

- **REFERENCES** Ministry of National Defense (2021), Military Physical Training Textbook, People's Army Publishing House. Tran Ngoc Chau (2023), Content of the Sports Injury Special Topic, Internal Circulation. Nguyen Van An (2022), Techniques for Preventing Injuries in Sports, Sports Science Journal. Bompa, T. (2009), Periodization Training for Sports. Human Kinetics. [1].
- [2]. [3]. [4].