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## Preventive measures and management strategies for sports injuries by university physical education teachers

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### Abstract

With the widespread adoption of sports in university education, students inevitably face sports injuries when participating in various physical activities. Physical education teachers play a crucial role in the teaching process, not only needing to teach correct sports techniques but also implementing effective preventive measures and management strategies to reduce sports injuries. This paper aims to explore and evaluate the problems and solutions related to preventing and managing sports injuries by university physical education teachers. These improvements can significantly enhance university teachers' teaching quality and further protect students from sports injuries.

**Keywords:** University, sports injuries, physical teacher, college student, preventive

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### 1. Introduction

In the current higher education system, physical activities are an essential part of students' daily life and studies. These activities not only help to enhance physical fitness but also promote students' mental health. However, with the popularization and diversification of physical activities, the risk of sports-related injuries has also increased. These injuries can negatively affect students' health and academic performance. Therefore, the responsibilities of university physical education teachers in preventing and managing sports injuries have become increasingly significant <sup>[1, 2]</sup>.

The duties of physical education teachers extend beyond teaching correct sports skills; they must also ensure the safety of students during physical activities. Research indicates that effective preventive measures can significantly reduce the probability of sports injuries, while appropriate injury management strategies can mitigate the adverse outcomes of such injuries. Despite this widespread knowledge, many physical education teachers still face challenges in practical courses, such as a lack of professional training and insufficient physical education resources to handle emergencies <sup>[3]</sup>.

This study aims to thoroughly explore the shortcomings of university physical education teachers in preventing and managing student sports injuries and to propose corresponding solutions. By analyzing the existing problems, the study offers specific improvement strategies to provide practical references and suggestions for the safe conduct and management of university physical education classes. Through this research, we hope to provide university physical education teachers with a clear framework to help them more effectively prevent and address injuries during student sports activities, thus creating a safer and healthier learning and exercise environment.

### 2. Current Issues

#### 2.1. Lack of systematic preventive education and training

Despite the critical importance of preventive measures in reducing sports injuries, many university physical education teachers still need to receive systematic education and training in prevention.

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This deficiency hampers their ability to implement effective preventive strategies and safely guide students in physical activities.

### 2.2 Insufficient equipment and resources

There needs to be more investment in sports facilities and medical equipment in some universities. Moreover, even the existing facilities often fail to function correctly due to poor maintenance, which increases the risk of sports injuries.

### 2.3. Inadequate and unprofessional response to sports injuries

Quick and professional initial handling of sports injuries is crucial. However, not all physical education teachers possess the necessary first aid skills, leading to insufficient initial management of sports injuries and exacerbating the adverse outcomes.

### 2.4. Failure to consider individual differences among Students

Students vary significantly in physical condition, health status, and athletic ability. However, physical education often adopts a one-size-fits-all approach, neglecting the individualized needs of students, thereby increasing the risk of injuries.

### 2.5. Lack of effective communication and feedback mechanisms

In many universities, there needs to be more effective communication channels between physical education teachers and students and between the physical education department and the medical office. This hinders the exchange of information regarding the prevention and handling of sports injuries, slowing down response times and reducing efficiency.

### 2.6. Lagging training in preventive knowledge

With the continuous advancement of sports medicine research, new preventive and treatment methods are constantly emerging. However, these latest research findings and technologies are often not included in the professional development courses for physical education teachers, resulting in outdated knowledge and the inability to provide the most effective guidance and support.

## 3. Recommendations

Based on the issues above, the following are a series of specific recommendations:

### 3.1. Strengthen Teacher Training

Universities should organize regular professional development training for teachers, focusing on preventing and managing sports injuries. The training should include topics such as sports physiology, first aid skills, and personalized training methods to ensure physical education teachers can design safe and effective teaching plans based on the individual differences of students<sup>[4]</sup>.

### 3.2. Improve Sports Facilities and Equipment

School management should ensure that sports facilities and equipment meet the latest safety standards and are regularly maintained and upgraded. Additionally, budgets should be increased to procure necessary safety gear, such as protective equipment and mats, to reduce the risk of injuries during

sports activities<sup>[5]</sup>.

### 3.3. Enhance First Aid Response Capabilities

All physical education teachers should undergo professional first aid training, including cardiopulmonary resuscitation (CPR) and the proper use of first aid kits. This ensures that they can provide quick and effective initial medical assistance in the event of sports injuries<sup>[6]</sup>.

### 3.4. Implement Personalized Training Plans

Physical education teachers should consider the differences in students' physical conditions and athletic abilities to design individualized teaching plans. Regular fitness tests and health assessments should be conducted to adjust the teaching plans accordingly, ensuring the safety and health of every student<sup>[7]</sup>.

### 3.5. Establish Effective Communication and Feedback Mechanisms

Schools should establish effective communication channels, including an information-sharing platform among physical education teachers, students, parents, and medical personnel. This channel can be used to report injuries promptly, exchange preventive measures, and assess feedback, thereby improving student management efficiency and raising awareness of injury prevention<sup>[8]</sup>.

### 3.6. Update and Integrate the Latest Knowledge on Sports Injury Prevention

The physical education department should regularly update the training courses and materials for teachers, integrating the latest research findings in sports medicine. By collaborating with sports medicine experts, modern training techniques and injury prevention strategies can be introduced, enabling physical education teachers to acquire the most current and cutting-edge knowledge and skills related to sports injury prevention and management<sup>[9]</sup>.

By implementing these strategies, universities can effectively enhance the ability of physical education teachers to prevent and manage sports injuries in students, thereby creating a safer and healthier environment for physical activities. This helps improve students' athletic performance and significantly reduces the learning and living obstacles caused by sports injuries.

## 4. Conclusion

In university physical activities, preventing and managing sports injuries are crucial to ensuring the health and safety of students. Physical education teachers play a significant role in this process, as they need to teach correct sports skills and possess professional knowledge and skills in preventing and handling sports injuries. This paper analyzes the current issues, including the lack of systematic preventive education and training, insufficient equipment and resources, inadequate and unprofessional responses to sports injuries, failure to consider individual differences among students, lack of effective communication and feedback mechanisms, and lagging updates in preventive knowledge. Corresponding solutions are proposed.

The specific recommendations include: Enhancing teacher training to ensure they have the latest sports medicine knowledge and first aid skills. Improving sports facilities and equipment to provide a safe exercise environment. Developing detailed preventive and emergency plans to

increase the ability to handle unexpected situations. Enhancing individualized instruction to meet the different needs of students. Establishing effective communication and feedback mechanisms to ensure coordination among departments and continuously updating and learning the latest preventive knowledge to ensure teachers' professional knowledge is advanced.

By implementing these measures, universities can effectively reduce the risk of sports injuries among students during physical activities and improve teachers' ability to respond to emergencies, thus creating a safer, healthier, and more favorable environment for sports activities. Physical education teachers will play an even more critical role in this process. Their professional level and response capabilities will directly impact students' exercise experience and health development. Therefore, universities should place high importance on the professional development of physical education teachers to safeguard the comprehensive development of students.

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