

Exploring Musculoskeletal Injuries and Personalized Recovery Management in Athletes [Letter]

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Dear editor

It is a great honor to have the opportunity to read the manuscript titled “Personalizing Injury Management and Recovery: A Cross-Sectional Investigation of Musculoskeletal Injuries and Quality of Life in Athletes.”¹ This study presents a cross-sectional investigation with detailed data and analysis, exploring the critical issue of enhancing the quality of life in injured athletes through personalized management and recovery. The findings provide valuable insights for developing more comprehensive and individualized rehabilitation strategies. However, I believe the study has several limitations that need to be addressed.

Study Design and Sample Selection

The study adopts a cross-sectional design, which is inherently limited for establishing causal relationships. While the authors discuss the impact of injuries on quality of life, this conclusion cannot be definitively supported by cross-sectional data alone. In fact, the epidemiological characteristics of sports-related musculoskeletal injuries among youth athletes are complex.² I recommend incorporating longitudinal follow-up to assess long-term changes in the athletes' quality of life. Additionally, the sample is restricted to athletes from Eastern Saudi Arabia, which may limit the external validity of the study and its generalizability to broader populations from other countries or regions.

Limitations in Data Collection Tools

Although the study uses the Oslo Sports Trauma Research Center Overuse Injury Questionnaire (OSTRC-O) and the RAND SF-36 health Survey, there is insufficient discussion on their applicability. For instance, did the authors consider the potential impact of cultural differences on the reliability of these questionnaires? While these tools are widely used globally,³ it would be beneficial for the authors to verify their suitability for Saudi Arabian athletes or provide supporting literature. This is particularly important concerning cultural differences that may influence the measurement of quality of life. Furthermore, the study heavily relies on subjective self-reported data without integrating objective assessments such as imaging or functional testing. This may introduce bias in evaluating the severity of injuries. Therefore, I suggest complementing the subjective data with more objective measures, such as imaging studies or functional assessments, to enhance the accuracy of the findings.

Definition and Assessment of Overuse Injuries

The definition and assessment criteria for acute injuries are clearly stated, but the description of overuse injuries remains vague. It would be helpful to provide a more detailed explanation of how overuse injuries are identified in the athletes, and whether standardized criteria are used to evaluate these injuries. Since overuse injuries tend to develop gradually, accurately distinguishing the severity of these injuries is critical to the study's conclusions.

Insufficient Personalized Treatment Recommendations

While the article emphasizes the importance of personalized treatment for athletes, it lacks substantial recommendations or concrete guidelines. Personalized medicine has theoretical significance, but the practical application of these principles in sports medicine should be elaborated further. For example, the authors could provide specific interventions based on athletes' biomechanical characteristics or training history, or discuss how psychological factors and social support systems can be integrated to achieve comprehensive recovery.

Limitations in the Assessment of Quality of Life

Although the study utilizes the SF-36 questionnaire to assess quality of life, relying solely on this tool may not fully capture the psychological and social dimensions of the athletes' health.⁴ I recommend incorporating additional tools, such as the Athlete Psychological Health Inventory, to provide a more comprehensive evaluation of psychological and social functioning.

This study provides valuable data and recommendations for managing musculoskeletal injuries in athletes and holds promise for broader application in the future. However, there is room for improvement in the study design, data analysis, and the specificity of the personalized treatment recommendations. I hope the authors will consider these suggestions to enhance the scientific rigor and practical utility of the manuscript.

Disclosure

The author reports no conflicts of interest in this communication.

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