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PREVALENCE OF MUSCULOSKELETAL OVERUSE INJURIES AMONG MALAYSIAN ELITE ATHLETES DURING THE PREPARATION PHASE FOR INTERNATIONAL SPORT COMPETITION (2023) Journal of Health and Translational Medicine, 26 (Special Issue 2), pp. 286-292.

DOI: 10.22452/jummec.sp2023no2.31

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#### Abstract

Intensive training with a high volume of training in preparation for the tournament may predispose athletes to overuse injuries. Therefore, this study aims to determine the prevalence of musculoskeletal overuse injuries among Malaysian athletes during the pre-competition phase. A 13-week prospective cohort study was conducted, including 100 elite athletes representing Malaysia at Commonwealth Games, Asian Games and World Championships. Data on overuse injuries were collected every second week using the Oslo Sports Trauma Research Center Overuse Injury Questionnaire. The average weekly prevalence of overuse injuries was calculated using the questionnaire results. A total of 119 cases of substantial overuse condition were reported, which were in the back (35 cases), knee (31 cases), ankle (28 cases), and shoulder (25 cases), affecting 100 athletes (100% of the cohort). About 42.5 % of the participants classified themselves as having substantial overuse problems, leading to a moderate (71%) or severe (29%) reduction in sports participation or performance or inability to participate in high-performance activities. The average weekly severity score for the back was 16, 12 cases for the shoulder, and the same score of 14 cases for the knee and ankle. Overuse injuries occurred among elite Malaysian athletes during the preparation and training phase for international competition due to the rapid intensity of the training. This study suggests that a guideline is needed for injury prevention strategies for the benefit of Malaysian athletes to prevent injuries. © 2023, Faculty of Medicine, University of Malaya. All rights reserved.

#### **Author Keywords**

Ankle; Athlete; Injury; Malaysia; Overuse

#### Index Keywords

adult, Article, athlete, cross-sectional study, female, human, human experiment, Likert scale, Malaysian, male, musculoskeletal injury, outcome assessment, practice guideline, prevalence, prospective study, questionnaire, sport, training, young adult

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Publisher: Faculty of Medicine, University of Malaya

ISSN: 18237339 Language of Original Document: English Abbreviated Source Title: J. Health Transl. Med. 2-s2.0-85174029378 Document Type: Article Publication Stage: Final Source: Scopus

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