

## Relationship Between Disordered Eating, Menstrual Dysfunction and Musculoskeletal Injuries Among National Athletes in Sri Lanka

IAP De Silva<sup>\*1</sup> and WKSDA Wickramarachchi<sup>1</sup>

<sup>1</sup>*Department of Sports Sciences and Physical Education, Faculty of Applied Sciences, Sabaragamuwa University of Sri Lanka*

*\*amashadesilva02@gmail.com*

The female athlete triad is a well-known syndrome that has an impact on two interconnected conditions such as Eating Disorder (ED) and Menstrual Dysfunction (MD). As a result of such conditions, Females have particular reasons to sustain injury situations. Musculoskeletal injuries (MI) are defined as any injury to the bones, muscles, ligaments, nerves, or tendons that causes discomfort. The main purpose of this study was to identify the relationship between eating disorders, menstrual dysfunction, and musculoskeletal injuries among selected female national athletes in Sri Lanka. The study was conducted as a retrospective cohort study. One hundred female athletes who represent the national level in selected sports between the ages of 20-30 were selected as the study sample from a random sampling method. The sample consisted of Basketball (14), Cricket (28), Football (22), Hockey (22), and Netball (14) playing females excluding mothers and pregnant women. Data were collected through Eating Disorder Examination Questionnaire (EDE-Q) which includes information regarding ED and MD and Modified Standard Musculoskeletal Injury Questionnaire. Spearman correlation test, ANOVA, and Tukey pairwise comparison test was used to analyze data using Minitab 19 software. The average ED, MD, and MI of athletes were 12.9, 20%, and 1.3 respectively. There was no relationship between ED and MD ( $r = -0.022$ ,  $p > 0.05$ ); ED and MI ( $r = 0.122$ ,  $p > 0.05$ ) and MI and MD ( $r = 0.079$ ,  $p > 0.05$ ). ED and MI were not significantly different among athletes engaged in different sports categories ( $p > 0.05$ ). Furthermore, MD was also not significantly different among athletes engaged in different categories of sports ( $p > 0.05$ ). In conclusion, there is no relationship between eating disorders, menstrual dysfunction, and musculoskeletal injuries among female athletes.

Keywords: Female Athletes, Syndrome, Injury Situation