

## Impact of Low Energy Availability and Menstrual Dysfunction of Women's Kho - Kho National Team in Sri Lanka

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### Abstract

Kho - Kho is a very strategic and difficult sport and it is one of the two most widely used traditional tags. Low Energy Availability (LEA) (with or without disordered eating) and Menstrual Dysfunction (MD) common among young women who participate in sports. This study aimed to identify the impacts of low energy availability and menstrual dysfunction of the Sri Lanka National Women Kho-Kho team. A descriptive cross-sectional research design was used to this study. A total of 15 national female Kho-Kho players who aged between 26 to 30 were recruited in the study according to total sampling method. LEA was measured using 3 days diary recall, 3 days physical activity log. Eating Disorders (ED) were assessed using EDE-Q, menstrual dysfunction was assessed using the LEAF-Q standard questionnaire. The data were analyzed by using SPSS software Kruskal-Wallis test. According to that analysis, LEA was highly prevalent among the athletes (87%) and EA (13%). EDs were highly related to the shape concern (33.33%) and weight concern (26.66%) among athletes. MD percentage of the Kho-Kho team was reported as a 13.33%. Therefore, athletes in Sri Lanka National Women's Kho-Kho team should be made aware primary amenorrhea (20%), secondary amenorrhea (6.66%), oligo menorrhea (13.33%), and menorrhagia (26.66). The MDs were prevalent among the athletes at a level that should take attention. The study's findings allow us to draw the conclusion that the athletes in Sri Lanka's National Kho-Kho team have serious issues. When considering the menstrual dysfunctions among the selected athletes, it can be recommended that they have to pay more attention regarding the nutrition intake which affect the menstrual function as higher number of issues of menstrual cycle were reported among LEA athletes. Especially LEA among athletes of this condition, and further remedies should be taken to prevent the risk factors of LEA and MD and regular inspection should be performed on the risk factors to enhance their overall health.

**Keywords:** *Fat free mass, Kho-Kho, Low energy availability, Menstrual dysfunction*