Female Athlete Triad: Lack of Awareness and Subsequent Consequences

Sir,

Regular exercise and optimal nutrition are important for a healthy and disease-free life. The benefits of exercise and physical activity are far greater than the risks; therefore, the American College of Sports Medicine (ACSM) encourages all women to participate in physical activity and sports.¹

Young females partaking consistently in athletic activities, recreational games, and elite sports competitions have grown exponentially all over the world including Pakistan. We have women’s national teams of judo, swimming, cycling, badminton, football, cricket, boxing, and karate.

Despite the benefits of exercise, certain risks are associated with competitive sports. Young female athletes are especially vulnerable to health risks and sports-related injuries. Sports that accentuate aesthetics and leaness, such as long-distance running, gymnastics, swimming, cycling, tae-kwon-do, judo, boxing, and karate are considered high-risk sports that correlate with the incidence of menstrual dysfunction, low energy availability, and decreased bone mineral density (BMD), collectively known as the “female athlete triad”.²³

The term “female athlete triad” was first coined by the women’s task force of the ACSM in 1992, after the death of gymnast, Christy Henrich, at the age of 22 years with 64 pounds weight due to anorexia.⁴ In 1994, medical professionals, sports federations and the general population became more aware of the devastating consequences of this condition.

Female athletes are often present with at least one of the three triad components. Early diagnosis and intervention are fundamental to impede its progression to serious end-points including bulimia/anorexia nervosa, menstrual dysfunction and osteoporosis.⁵

The outcomes of triad especially the loss of BMD can be catastrophic for a female athlete, particularly premature osteoporotic fractures can occur in and out of sporting events.⁶ Furthermore, the lost BMD may never be regained.⁷

The potentially irreversible sequelae of the “female athlete triad” emphasise the basic requirement for anticipation, early diagnosis, and treatment. There is no single diagnostic test to identify the triad early on. To protect the athletes, timely recognition of risk factors leading towards the triad is vital to limit its complications. Clinical features related to the triad often do not show up at first; therefore, to avoid undesirable outcomes, pre-participation screening, and yearly check-ups should be implemented at every level of sporting events in our country. Screen tools like Pre-participation gynaecological examination and low energy availability in females (LEAF) questionnaire should be used regularly for the early detection of symptoms in women.³ Diagnosis and treatment come later and ought to include an interdisciplinary therapeutic approach.

The policymakers should be given a deeper insight about the female athlete triad’s lack of awareness and subsequent consequences related to health and performance. Team physicians, physiotherapists and coaches should undergo comprehensive education programmes to identify symptoms associated with the triad. Furthermore, they should be trained to screen female athletes with decreased energy and irregular menstruation to mitigate the danger of developing the triad.⁷ If one tackles this issue head-on, it would improve the health of athletes and their performance. Furthermore, Pakistan might also once again reach the pinnacle of sports, which is essential to improve the economy and promote a soft image of the country internationally.

COMPETING INTEREST:
The authors declared no competing interest.

AUTHORS’ CONTRIBUTION:
SR: Responsible for conception, drafting, and final approval.
SK: Responsible for drafting.

REFERENCES


Saad Rauf and Samra Khokhar

Department of Rehabilitation Sciences, Riphah International University, Islamabad, Pakistan

Correspondence to: Dr. Saad Rauf, Department of Rehabilitation Sciences, Riphah International University, Islamabad, Pakistan

E-mail: drsaadyousafzai@gmail.com

Received: June 28, 2022; Revised: September 06, 2022; Accepted: September 13, 2022

DOI: https://doi.org/10.29271/jcpsp.2023.02.241