

Letter to the Editor

Athletic on-field heart rate: a demand of modern cricket

Sir,

Cricket has transformed very quickly from a gentleman's game to a game which demand high standard of physical and physiological fitness. Cricket has a diversity of game formats ranging from 5-day test cricket to a shorter but dynamic t20 format. Since last two decades a lot of cricket is being played throughout the year, there is no discrimination of summers and winters as what used to happen during the prior days. For this reason now the standard of physiological demands of this sport has risen too. Good heart rate is always an important aspect of physiological fitness of athletes and it has a mighty impact on the performance of players in the grounds.

Temperature has a huge impact on the heart rate of athletes. In a study published in International Journal of Fitness on Jan 2008, twenty-five healthy cricketers volunteered to participate, each player performed the activity under warm and cool surroundings. Their heart rates were assessed and ratings of exercise intensity based on the subject's feeling and perceptions of thermal strain were obtained on the completion of each cricket over. The study concluded that the heart rates during the warmer conditions were significantly higher than that in cooler conditions.¹

To counter this probable effect of temperature on the heart rate and performance of athletes there are many things that can be done. A study was published in International Journal of Sports physiology and performance where two groups of male club cricketers were made that is heat acclimatization and control group. 30 minute treadmill trials were done first at baseline then after acclimatization. Repeating the cycle for 4 days showed a moderate decrease of 30 minute heart rate in the acclimatization group. This study shows that heat acclimatization drills can be useful for the players who have few series/tournaments scheduled in summers.²

Another thing that sounds very important is to bridge the gap between pre-match training and match demands. A study conducted in Australia shows that conditioning drills matched or exceeded the maximum game heart rates. In contrast to this, skill and simulation drills matched average game heart rates for some but not all positions. This study concluded that conditioning-type drills replicates or exceeds cricket match demands but

this was not seen in simulation or skill-based drills. Some revision is needed in skill and simulation training practices which will ensure closer replication of a cricket match demand.³

Players with a good on-field heart rate and physiological fitness, look more quick and athletic on the cricket ground, they can maintain their fitness level from ball one till the last ball of the game. This is the demand of modern cricket which has been instilled by extreme athleticism in the recent years. For this reason, training sessions and fitness drills must have to be modified in a way that improves the heart rate as well as physical fitness of the players.

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Cite this article as: Ul-Haq F, Yaqoob U, Sarfaraz A, Khan MMA. Athletic on-field heart rate: a demand of modern cricket. *Int J Community Med Public Health* 2017;4:4350-4350.