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Effect on skills of Manipur women's football players before and during menstruation: A review

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Abstract

The current review was expected to track down the impact on abilities of Women's' Football players previously and during period. The point of the review was to find whether feminine cycle affects different abilities. The example comprised of 20 subjects, who were girls from the Manipur Football Team. Irregular examining method was utilized to choose the subjects. The age gathering of the subjects were 17-26 years with the mean of 21.40. The test thing chose were as per the following for example 30 meter running with ball, kicking precision and juggling. The current discoveries towards, pre and post impacts are very through inciting and critical. Suitable factual strategy and methods will be utilized. The factual meaning of this study was set at a likelihood level of ≤ 0.05 . The measurable method elucidating measurements "t test" were utilized to figure out the distinction. The consequences of the review shown that there is a massive contrast between the chose factors and execution.

Keywords: Skills, football, menstruation, kicking, accuracy and juggling

Introduction

The Indian Manipur Association Women is an exceptionally expected football competition held in the province of Manipur, India. Known for its rich football culture, Manipur has produced probably the best women footballers in the Nation, and this association fills in as a stage to show their ability. The competition highlights groups from different districts and cities within Manipur, with each team comprising skilled and dedicated female players.

By and large, the India Manipur Association Women is a festival of Women's football in Manipur, giving a stage to players to sparkle and moving people in the future of women footballers. Football is the most well known sport on the planet and is perform by people, kids, and grown-ups with various degrees of skill. Football execution relies on a bunch of variables like specialized/biomechanical, strategic, mental, and physiological regions. Endeavors to further develop soccer execution frequently center around strategy and strategies to the detriment of actual wellness. Women's football has had a surprising beginning in the US. As the 21st century starts, the US winds up as ostensibly the top country on the planet for women's football, both with regards to cooperation and in global rivalry. However, women's football got off to a poor start in this country. Women's associations existed in Europe as far back as 1930, and worldwide contests date back to the 1950s. In the US, nonetheless, coordinated women's football didn't flourish until the last part of the 1970's, and, surprisingly, this was part of the way an outgrowth of the Title IX regulation of 1972 ordering orientation value in schooling. The main public women's association didn't send off until 1995, and it was only after 2001 that the principal proficient women's association made its introduction.

But when women's soccer did finally take off in the US, it was furiously, filled by huge support at the adolescent and beginner levels, quickly developing interest by standard game fans and the media, and the developing acknowledgment of women's games overall. After two World Cup titles and Olympic gold and silver decorations, the US overwhelms the world in the women's down, driving the way as it flourishes all through the remainder of the world, with every one of the social ramifications that follow. In any case, the story prompting this apex of progress is a fascinating one. Inside this perseverance setting, various dangerous explosions of action are required, including hopping, kicking, handling, turning, running, evolving pace, and supporting intense compressions to keep up with equilibrium and control of

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the ball against guarded pressure. It is significant as in any game to concentrate on the physiological qualities of women competitors.

Women's overall have a lower greatest vigorous power limit than men (65-75% of male vigorous power) because of lower hemoglobin levels and a more noteworthy measure of fat tissue (fat). They additionally play at an activity force of around 70% of VO_2 Max during matches. Pulse designs are comparable between both male and females during coordinate play with the last option recording upsides of 89-91% of maximal pulse during 66% of the game. Notwithstanding, the lower force levels commonly connected with the female game are expected to a lesser physical limit. It has been recommended that the anaerobic framework is better evolved in women's footballers than their oxygen consuming framework.

Rebecca K. Randell, *et al.*, (2021) ^[15] express that Female soccer has seen a significant ascent in cooperation, as well as expanded monetary help from overseeing bodies throughout the past ten years. In this way, there is an onus on specialists and clinical divisions to foster a superior comprehension of the actual qualities and requests, and the wellbeing and execution needs of female soccer players. In this audit, we talk about the flow research, as well as the information holes, of six significant subjects: actual requests, ability ID, body arrangement, injury hazard and avoidance, wellbeing, and sustenance. Information on female ability ID are scant, and future investigations need to explain the impact of relative age and development choice across age gatherings. With respect to actual requests, more exploration is required on the example of focused energy running during matches and the commitment of soccer-explicit developments. Wounds are normal in female soccer players, yet focusing on characteristically modifiable variables with injury avoidance customized can diminish injury rates. The anthropometric and actual attributes of female players are heterogeneous and setting explicit targets ought to be put in youth and sub-world class players down. Feminine cycle stage might impact execution and injury risk; in any case, there are not many examinations in soccer players. Sustenance assumes a basic part in wellbeing and execution and guaranteeing sufficient energy consumption stays a need.

Xanne, (2003) ^[22] concentrated on the likely impacts of the female steroid chemical vacillations during the period on practice execution. Most examination likewise reports no progressions over the feminine cycle for the numerous determinants of maximal oxygen utilization (VO_2 max, for example, lactate reaction to work out, bodyweight, plasma volume, hemoglobin fixation, pulse and ventilation. Hence, it isn't is business as usual that the ongoing writing demonstrates that VO_2 max isn't impacted by the period. These discoveries propose that consistently discharging female competitors, contending in strength-explicit games and serious anaerobic/oxygen consuming games, don't have to adapt to period stage to augment execution. For delayed practice execution, be that as it may, the feminine cycle might make a difference. Despite the fact that most exploration recommends that oxygen utilization, pulse and rating of seen effort reactions to sub-maximal consistent state practice are not impacted by the monthly cycle. During delayed practice in hot circumstances, a lessening in practice time to depletion is displayed during the mid-luteal stage, when internal heat level is raised. Hence, the mid-luteal stage meaningfully affects delayed practice execution through raised internal heat level and possibly expanded cardiovascular strain.

Menstruation

Saunders reports that menstruation period for the most part begins between the ages of 11 and 14 and go on into the forties or fifties. The shedding of the covering of the uterus in ladies and pubescent young ladies, commonly occurring like clockwork. The arranging is made of tissue and blood and is expected to support a prepared egg. Assuming there is non fertilized egg, the coating is removed from the uterus. From the outset, the periods might be unpredictable, however whenever they are laid out, they ordinarily happen in a clear cadence, at timespans to 35 days. In these ordinary cycles, there might be month to month varieties of a couple of days, which are viewed as typical. Cycle length might be impacted by changes in environment or day to day environments, or by profound variables. Slight inconsistencies, particularly in the event that they happen over a period, might be alerts of unsettling influence of either the thyroid or pituitary organs, or of cancers of the uterus or ovaries. An ordinary menstruation period shifts somewhere in the range of 23 and 35 days, the normal being 28 days. The cycle addresses a perplexing transaction of chemicals and regularly has three stages: the follicular stage where the follicle develops, the ovulatory ease in which the egg is delivered, and the luteal stage where the coating of the belly? Gets ready for implantation of the treated egg. In the event that implantation doesn't happen, the belly lining leaves away and period starts. Women have played a vital role in history of mankind. Butte conventional limitations have consistently controlled their drive to that degree in records of development where they lost their grasp on issue various and had been treated as a prey to social limitations and wrongs. There have been fearless ladies no question, yet there were dependably a modest bunch where effect won't be quickly brushed by the over rule nonfolk of the times. In each culture man and lady assume different part with the social association. These jobs are characterized by the family member and correlative commitment, which each sex makes for the counteraction of self and engendering of species which is the point of every living being and the naturally resolved commitment of human life. Science and sports have generally progressed however the negative demeanor towards the ladies cooperation in sports, particularly in the minimized game during the monthly cycle. We know today that there isn't anything repulsive about this physiological reality, which no ladies in grown-up stage can escape. The truth of the matter means that one's schooling and development and the present-day ladies must reality this test and face it decisively in light of a legitimate concern for ordinary wellbeing and childhood and odd notions, while disallowance encompassing the total typical physiological capability endured for quite a long time. Negative disposition and response to the feminine cycle have demonstrated hard to change. This most likely and unquestionably somewhat is connected with a general absence of information about this total and befuddling subject. The specialist needs to illuminate how the female body functions and consequently will do a lot to negative the trepidation and misguided judgments that many have endeavored towards this significant physiological capability.

Effects of the Menstrual Cycle on Training and Performance

The female sex chemicals apply a scope of physiological consequences for many metabolic, thermoregulatory, cardiovascular, and respiratory boundaries that may influence athletic execution. For instance, estrogen has been displayed to have:

Effects on the cardiovascular system

1. Altered blood stickiness.
2. Cholesterol level changes.
3. Vascular smooth muscle changes.
4. Regulation of substrate metabolism (body fuel).

Effects on regulation of substrate metabolism

1. Increased liver and muscle glycogen storage and uptake – possibly increasing endurance performance.
2. Glycogen-sparing through increased lipid (fat) production, muscle lipid breakdown, and greater use of free fatty acids.
3. Decreased insulin-binding ability-decreased glucose tolerance an insulin resistance i.e. Low levels of estrogen (in the follicular phase) favor the breakdown of the muscle glycogen for high intensity training and racing.

Methodology

SAI Football Skill Test: The football skill test used by SAI for sporting talent at young age consists of the following three test items:

- 30 meter running with the ball.
- Kicking accuracy.
- Juggling.

The techniques prescribed by SAI in (1992).

Creation Measures

- a) 30 meter running with ball will be estimated in timing and later on will be changed over into point as recommended by SAI standards.
- b) Kicking precision will be estimated in number of counts and later on will be changed over into focuses as endorsed by SAI standards.
- c) Juggling will be estimated in number of counts and later on will be changed over into focuses as recommended by SAI standards.

Equipment & Tool used

The instrument utilized in the review was gotten from standard firms, which take care of the requirements of different examination research facilities in India and abroad and thus the instrument was viewed as solid with the end goal of this review.

With the end goal of the review, twenty understudies were haphazardly chosen from Manipur women's football players, who play football routinely during the training time for 2 hours. The age of the subjects chose for the review ran between 17 to 26 years. The subjects were mentioned to take part in the testing system earnestly and with most extreme genuineness in the current review.

Procedures for collecting Data

Every one of the subjects in the current review were tried on the chose measures of physiological and actual boundaries. The vital markings were finished before the beginning of the test and the researcher stringently followed the particular as referenced in the test. The whole test were exhibited and made sense of for the subjects by the researcher. Preceding the organization of the tests the subjects were allowed an opportunity to rehearse the recommended tests so the subjects made themselves acquainted with the test and knew precisely exact thing must be finished.

Procedures of analyzing Data

The researcher had taken pre information before multi week

of menstruation period cycle and the post information was taken during the second day of menstruation cycle.

(1) 30 Meter Running with Ball

Equipment: A stopwatch, 6 footballs, stamping powder and estimating tape.

Purpose: To evaluate the speed and football control while running, of potential football players.

Test Administration: Two straight lines, 30 meter separated, were set apart on the field. The players were told to remain behind an obvious line without contacting the line, with a football put on the line. On the sign Prepared? Go!, the clock begins the stopwatch and the player begins running with the ball as quick as conceivable to arrive at the 30 meter finish line, by pushing the ball with leg control and by making at least four contacts with the ball at each touch including the principal contact. Time was estimated from the timespan 'GO' until both ball and player reach to the end goal. Each subject was given two endeavors at a timespan seconds and the best presentation timing among the two endeavors was scored with the assistance of SAI recommended scores.

(2) Kicking Accuracy

Equipment: A football goal post, expanded footballs, stamping powder, a tape and two ropes.

Purpose: To evaluate the kicking effectiveness of potential football players.

Test Administration: The goal line was isolated into three equivalent parts by fixing two ropes. A football was set at the punishment spot checked (11 meters distance from objective line). The player was given ten endeavors 4 to kick the ball in left section, 4 to right part and 2 to the center piece of the objective in the accompanying succession initial two kicks into the right part followed by one kick in the center piece of the objective to be trailed by 2 kicks to the left part, and rehashing similar example for the excess five kicks. The ball was expected to cross the objective line in the air to have the ideal speed and strength in the kick.

Scoring: The number of right kicks into the assigned pieces of the objective in the 10 endeavors were scored with the assistance of SAI recommended standards.

(3) Juggling

Equipment: Three footballs.

Purpose: To survey the ability to adjust, nimbleness, response capacity and feeling of hint of the ball.

Test Administration: The subject was told to keep the ball in the air by shuffling ceaselessly and was informed that she might utilize any piece of the body with the exception of hands while shuffling (foot, thigh, chest, head). For beginning the shuffling, the subject was permitted to toss the ball in the air or to skip the ball on the floor and begin shuffling till the subject had the option to shuffle the ball without dropping it on the ground.

Scoring: The quantities of contacts made by the subject constantly for better execution two endeavors were permitted to each subject. The quantities of contacts were then changed

over into focuses with the assistance of scoring standards endorsed by SAI.

Result and Discussion

Table 1: Descriptive statistics of Women's Football players on 30 meter running with ball.

Variable	Pre Mean	Post Mean	Mean Difference	't' Value
30 meter running with ball	2.2	1.8	0.4	1.904

*Significance $t(19)0.05 = 1.729$

Cal $t.05 = 1.904$

Source: Devi, K. S, Priyanka. (2017) [4]. Effect on skills of women's soccer players before and during menstruation, IJPNPE 2017; 2(2): 326-329.

It is apparent from Tab.1 that gotten t-esteem (1.904) is more noteworthy than classified t.05 hence showing that there was a huge contrast among women's football players previously and during (second day) feminine cycle in 30 meter running with ball.

Table 2: Descriptive statistics of Women's Football players on kicking accuracy.

Variable	Pre Mean	Post Mean	Mean Difference	't' Value
Kicking accuracy	2.35	1.95	0.4	1.187

*Significance $t(19)0.05 = 1.729$

Cal $t.05 = 1.187$

Source: Devi, K. S, Priyanka. (2017) [4]. Effect on skills of women's soccer players before and during menstruation, IJPNPE 2017; 2(2): 326-329.

It is apparent from Tab.2 that obtain t-value (1.187) is less than classified t.05 in this manner showing that there was a critical contrast among women's football players previously and during (second day) menstruation cycle in Kicking precision.

Table 3: Descriptive statistics of Women's Football players on Juggling.

Variable	Pre Mean	Post Mean	Mean Difference	't' Value
Juggling	1.95	1.65	0.3	1.146

*Significance $t(19)0.05 = 1.729$

Cal $t.05 = 1.146$

Source: Devi, K. S, Priyanka. (2017) [4]. Effect on skills of women's soccer players before and during menstruation, IJPNPE 2017; 2(2): 326-329.

It is obvious from Tab.3 that acquired t-value (1.146) is less than classified t.05 hence demonstrating that there was a critical contrast among women's football players previously and during (second day) menstruation period in Juggling.

The investigation of information obviously uncovers that there were huge contrasts in 30 meter running with the ball between previously furthermore, during monthly cycle time of the subjects and the investigation of information likewise plainly uncovers that there was critical distinction in kicking exactness as well as juggling between previously and during menstruation cycle time of the subjects.

It is obvious from Tab.1.that there was a massive contrast in the 30 meter running with the ball. It was appeared on the other side the assistance of pretest (before multi week of

monthly cycle period) and posttest (during second day of feminine cycle) of the subjects that during their menstruation cycle the presentation of 30 meter running with the ball is better. The impacts of changes have been acquired the factors subsequent to applying the SAI football ability test. It is obvious from Tab.2.and Tab.3.that there were critical contrast in the kicking exactness as well as juggling between previously and during period of the subjects. It was found that during their menstruation cycle period the exhibition of kicking precision and juggling were diminished in examination to their presentation of before monthly cycle. The justification behind meaningfully affecting the factors was shown by SAI football abilities test.

Therefore, there will be significant effect on the skills of women football players before and during menstruation.

Conclusion

The women's football is still a work in progress both from a physical and specialized perspective. It is fundamental that players and mentors have great information in sports medication/sports science to take full advantage of their true capacity. Women's' players anything their actual wellness levels, must consistently be painstakingly noticed and informed to decrease the gamble with respect to injury and guarantee constant great wellbeing. Coaches should be discrete and understanding while managing women's footballers and it very well might be valuable to include a female inside the playing staff while examining individual issues. Nonetheless, there is still a lot of space for additional examination into a game that is both extremely exciting to watch and which frequently produces moments of high skill.

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