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Analysis of Selected Physical Fitness of University, Inter-University & State Level Male Hockey Players

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Abstract:-

➢ ***Background***

Health is a divine state of balance between body and mind. Athletic achievements are always an output of inner strength and motor capabilities. To maintain a standard level of performance the physical fitness of players is very important. Hockey players need to display a high level of physical fitness for high level of stamina and consistent performance. Aim: The aim of the study was to analyze selected physical fitness of University, Inter-University & State level male hockey players. Materials and methods: It was a cross sectional study conducted among 750 rural children within 13 to 15 years of age. The sample was selected by convenient sampling technique. The data was collected by respective standardized tests. The differences among selected fitness and body composition parameters were computed by ANOVA and Post Hoc test. Results: A significant difference was noted among University, Inter-University & State level male hockey players. Conclusion: A significant difference was found between physical fitness and body composition of University, Inter-University & State level male hockey players. The physical directors must focus on these differences while selecting and training for physical fitness activities among University, Inter-University & State level male hockey players

Keywords:- *Physical Fitness, University, Inter-University, State Level and ANOVA.*

I. INTRODUCTION

Physical fitness is ability to perform aspects of sports, occupations and daily activities. It is a state of optimum health and well-being. It is picture of once health status and, more specifically, Physical fitness is generally achieved through proper nutrition, moderate-vigorous physical exercise and sufficient rest. Regular physical activity is of prime importance to improve overall health and fitness and to prevent many adverse health outcomes. The benefits of physical fitness exercises are depicted generally in healthy people, whereas people with poor physical activity are always at risk of developing chronic diseases, and in people with current chronic conditions or disabilities.

College students, in their adolescent age, experience various changes in their physical and sexual characteristics. They feel a great ability to perform courageously, which in turn can effect both positively or negatively on their health. Some of the activities encourage strength whereas some can develop stress. Dealing with stress is a part of personality development. Adolescents especially university, interuniversity and state-level hockey players are involved in such activities that puts them in conditions of various levels of stress. Regular involvement in physical activity during this transition age may help adolescent students to deal with stress, making their personality more feasible to deal with stress. There is need to find the differences in the physical fitness among adolescents performing at different level of Hockey. Hence comparison is needed in physical fitness of Male hockey players playing at university, interuniversity and state level.

II. OBJECTIVES OF THE STUDY

To conduct and compare selected physical fitness variables of university, inter-university and state level male hockey players.

III. MATERIALS AND METHODS

The study was conducted with descriptive research approach with a cross sectional research design. The sample consisted of total 90 University, Inter-University & State level male hockey players. The sample was selected using convenient sampling technique. 30 male hockey players were selected from each group. 6 variables were selected for the present study which represents physical fitness – Speed, Muscular endurance, Explosive power, Dynamic back strength, Flexibility, Endurance (Cardio-respiratory)

The data was collected bio physiological method. To assess the variables following tests were conducted 30 Yard Sprint run for speed, vertical jump for explosive power, sit and reach for flexibility and sit up test for muscular endurance. The data was analyzed by using both descriptive and inferential statistics. Demographic data was analyzed by

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using frequency and percentage distribution. Mean, standard deviation. paired t tests and ANOVA were used to compare the physical fitness among University, Inter-University & State level male hockey players.

IV. RESULTS

There is a significant difference in demographic data such as height, weight and BMI among all the three groups of university, inter university and state level players.A significant difference (P<.0001) was found in cardiorespiratory endurance among university, interuniversity and state level male hockey players. The mean 27.42 seconds in 12 minute run and walk test of state-level players were significantly higher compared to university (28.16) and interuniversity (30.24) hockey players.A significant difference (P<.046) was found in explosive power among university, interuniversity and state level male hockey players. A significant difference (P<.0001) was found in muscular endurance among university, interuniversity and state level male hockey players. A significant difference (P<.0012) was found in flexibility among university, interuniversity and state level male hockey players. A significant difference (P<.001) was found in the physical fitness: speed among university, interuniversity and state level male hockey players. A significant difference (P<.0021) was found in back muscle strength among university, interuniversity and state level male hockey players.

V. CONCLUSION

Among university players 14 (46.67%) were within 18 to 20 years of age, Among Inter-university players 15 (50 %) were within 18 to 20 years of age, among state-level players 9 (30 %) were within 18 to 20 years of age. The above data reveals that more number of university, inter-university and state level male hockey players were in the age group of 18-20 Years.

A significant difference was found between selected physical fitness variables of University, Inter-university and State level Male hockey players. A significant difference was found between supra iliac skin fold thickness of University, Inter-university and State level Male hockey players and body composition. No significant difference was found between other body composition variables; Biceps skinfold thickness, Triceps skinfold thickness and sub scapular skin fold thickness of University, Inter-university and State level Male hockey players. The physical directors must focus on these differences while selecting and training players with such criteria.

A significant difference was found between physical fitness of University, Inter-University & State level male hockey players. The physical directors must focus on these differences while selecting and training for physical fitness activities among University, Inter-University & State level male hockey players. Physical fitness is one of the most important measures in determining the physical strength and ability among players hence the individual difference norms must be considered while assessing the selecting the players for any sports competitions like hockey.

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