**RESEARCH ARTICLE**

PROMOTING AWARENESS AND STATUS OF HEALTH AND PHYSICAL FITNESS OF STUDENTS OF ARTS AND SCIENCE COLLEGE VIA A HEALTH REPORT CARD APPROACH

D.BALA KRISHNA[1], Dr. T. SIVA PRASAD[2], Dr. M. BUJJIBABU[3]

[1]Lecturer in Physical Education, AG & SG Sidhartha College, Vuyyuru, Krishna Dist.
[2]Lecturer in Physical Education, Department of Physical Education, KVRKVR&MKR COLLEGE, Khajipalem.
[3]Lecturer in Physical Education, Department of Physical Education, CR College, Chilakaluripet, Guntur Dist.
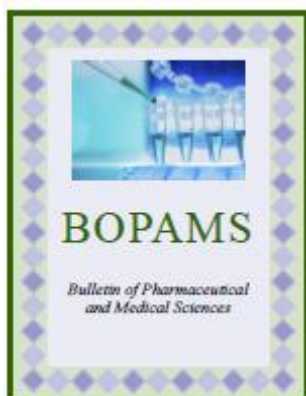
ABSTRACT

Physical activity is defined as any bodily movement produced by skeletal muscles that causes energy expenditure. Thus, physical activity occurs in many different settings. At school, physical activity includes participating in physical education, recreation and dance programmes, school athletics and active play during the recess; walking or cycling to and from school; and extracurricular opportunities that offer physical activities during leisure time. The purpose of this study was to assess physical activity levels during high school physical education. The data were considered in relation to recommended levels of physical activity to ascertain whether or not physical education can be effective in helping young people meet health-related goals. This research concluded students and youth from 10-20 years of age, were of suggested to carry out an average of at least 60 minutes exercises per day and up to several hours of at least moderate intensity physical activity. More vigorous intensity activities should be incorporated or added when possible, including activities that strengthen muscle and bone. Muscle and bone strengthening activities should be incorporated on at least 3 days of the week. Cardio respiratory fitness had the strongest association with BMI status.

©KY PUBLICATIONS

INTRODUCTION

PHYSICAL FITNESS: It is the ability to carry out daily task, without under the fatigue. Physical fitness means the capacity of an individual to must the varied physical demands of their sport without reducing the athlete to a fatigue state. The components of physical fitness are strength, speed, endurance, flexibility, agility and co-ordination (Fox, 1999).

AGILITY: Agility is the ability to change or alter quickly and accurately, the direction of body movement during activity agility is to a large extent dependent on neuromuscular co=ordination and reaction time. Agility may be improved with increased flexibility and muscular strength. *(Barry. L, 1982).*

SPEED: One important biometry ability required in sports is speed or the capacity to travel move quickly mechanically, speed is expressed through a rate between space and time. The term speed incorporates three Clements: reaction time, frequency of movement per time unit and speed of travel over a given distance. *(Wilmore and castile, 2004).*

MUSCULAR STRENGTH: As your life and lower a weight your muscle must generate enough force to move that weight. Muscular strength can be assessed by determining the amount of weight can be lifted in one repetition of an exercise. Strength can be developed by increasing the amount of weight that can be lifted in an exercise after a lower weight can be lifted 10-12 items easily. (Braill, 2000).

FLEXIBILITY: Flexibility is a a vital component of total physical fitness, providing functional, recreational and therapeutic benefits. Corbin and Lindsey (1985) described flexibility as "a measure of the range of motion available at joint of group of joints". Alter (1988) describes two type of flexibility: static flexibility, or degree of movements possible through a range without emphasis on speed or time of movement, and dynamic flexibility, the dynamic quality of movements through a range of considering speed, such as during physical activity Range of motion (ROM), measureable in linear or angular units refers to the degree of motion at a joint, and stretching is the process of elongating muscle and connective tissue to increase RoM and improve flexibility. *(D.Miller, 1995)*

STATEMENT OF THE PROBLEM: The present study is to know the awareness and status of health and physical fitness of students of arts and Science College with regard is their physical condition.

METHODOLOGY

To achieve the purpose of this study, ten hostel students from NAZARATH college of Arts & Science, Avada were selected as subjects. First the obese students were given health questionnaire to check their awareness. The questionnaire containing 10 questions focuses on their awareness on speed, strength, endurance, agility, flexibility, body mass index, physical fitness, blood pressure, heart rate and breathing rate. Pre-test and post-test were taken for those students. After the pre-test it was concluded that they don't have as much of knowledge on in a week for 3 months. Secondly, they were all given health report card & field workout to reduce their obesity. Early in the morning they need to go for compulsory physical exercise, **First-** 30 minutes walking or slow jogging, **Second-** strengthening exercise like sit ups and push-ups and **Third-** stretching exercise for all body parts were given continuously for one hour in 6 days a week. Only on Sundays they will be exempted from doing any exercises, but they will be engaged in some recreational activities. First they were all interested in Indoor games like carom & chess, but after two week they have developed interest in outdoor games like Volleyball, Tennis, Basketball and football. The students were give calorie chart to follow their diet control. Every day they have been asked to take the daily calorific intake. For an average healthy adult, calorific intake should range between 1m 700 to 2,500 per day. This amount of calorific intake must be equally distributed through all food groups in order to maintain optimum health. The food groups include carbohydrates proteins, fats, vitamins. For an average adult dies, it is needed to consume 200 grams of carbohydrates (800 calories), about 100 grams of protein, (400 calories). 60 grams of fat (540 calories), and unlimited vitamins and minerals. Adhering to this food chart will supply one with 2000 calories per day.

The students were asked to record their Height, Weight, Body Mass Index (BMI), Blood Pressure, and Pulse rate in health promote card by means of standard Equipment such as Stadiometer for height, weighting machine for weight, BMI Chart for Body Mass Index, Sphygmomanometer & Stethoscope for blood pressure as well as pulse rate. Heart beat per minute is calculated by the number of pulse rate. Heart beat per minute is calculated by the number of pulse count in 30 second multiplied by 2. The height of the students that ranged from 160-175 Cms, found on changes between per-test and post-test.

RESULTS AND DISCUSSION

AWARENESS TEST – TABLE – I

Test	Mean	SD	df	't' value	Table value
Pre-test	24.9	70.6	9	8.1	1.8333
Post-test	8.77	14.78			

Table I shows the difference between the mean and standard deviation values of the awareness in pre-test and post-test of selected variable. The post-test value is significantly greater than the pre-test value (24.9< 70.6 and 8.77 < 14.78). 't' value for awareness variables irrespective of different type of obese students is 8.1

against the table value 1.8333 at 0.1 level of confidence. Science they obtained't' value is greater than the table value it is implied that, the students improved a lot during the awareness classes on health and fitness conducted once in a week.

PHYSICAL FITNESS SCORE CARD TEST-TABLE II

Variables	Number	Mean df	SD Error	'T' value	Table value
Weight	10	11.80	3.425	10.8936	1.83
BMI	10	4.30	1.337	10.1666	1.83
Diastolic	10	10.80	7.005	4.8756	1.83
Systolic	10	21.00	16.944	3.9192	1.83
Pulse Rate	10	5.80	2.898	6.3283	1.83

Table value with 9df 1.83

The table II shows that the obtained dependent t-ratio values between the pre and post-test means on weight, BMI, diastolic, Systolic and Pulse Rate are 10.8936, 10.1666, 4.8756, 3.9192 and 6.3283 respectively. Science, the obtained 't' values are greater than the table value 1.83, it is understood that training program have significantly improved the fitness such as Ideal body weight, Body Mass Index, normal blood pressure (Diastolic and systolic) and accurate pulse rate. Dependent 't' test statistics reveals that the difference between the pre-test and post-test of all the selected variables are found significant.

CONCLUSIONS

The following recommendation was made. Students and youth from 10-20 years of age, were of suggested to carry out an average of at least 60 minutes exercises per day and up to several hours of at least moderate intensity physical activity. More vigorous intensity activities should be incorporated or added when possible, including activities that strengthen muscle and bone. Muscle and bone strengthening activities should be incorporated on at least 3 days of the week. Cardio respiratory fitness had the strongest association with BMI status. The physical directors play a vital role in preventing and combating obesity in students. Physical directors should be motivated to organize interesting games, PE lessons, and college sports activities and competitions for both normal and overweight students. Through diagnosis the negative features of the obese students were identified and various test, index, physical fitness, blood pressure, heart rate and breathing rate were given. It aided a lot in gaining Ideal body weight, body mass index, normal blood pressure (Diastolic, systolic) and accurate pulse rate, there by maintaining a hale and healthy physique.

REFERENCE

[1]. Fox, K.R.(1999). "The influence of physical activity on mental well-being". Public Health Nutrition, 2(3A), 411-418.

[2]. Johnson, Barry L.and Nelson, Jack, (1982) "Practical measurement of evaluation in physical education". Delhi: Surject Publication, pp.40-42.

[3]. Willmore, Jack H. and Costill, David L. (2004), "Physiology of sports and exercise". Champaign Illionsi: Human Kinetics publications, pp. 177-183.

[4]. D.Miller, patricia (1995). "Fitness programming and physical disability". A publication for disabled sports. U.S.A: Human Kinetics, P.102

[5]. Braill P.A., al. (2000). "Muscular strength and physical function". Medicine and science in sports and exercise, pp. 412. 416