Journal of Advances and Scholarly Researches in Allied Education
Vol. 16, Issue No. 6, May-2019, ISSN 2230-7540

Study on Significance of Physical Activity on Public Health

Matin Pramanik[1]* Dr. Minakshi Pathak[2]

[1] Research Scholar, Department of Physical Education, Sri Satya Sai University of Technology & Medical Sciences, Sehore, M.P.

[2] Research Guide, Department of Physical Education, Sri Satya Sai University of Technology & Medical Sciences, Sehore, M.P.

Abstract – Human beings are born to be physically active. Being physically active gives several advantages and is essential for a healthy life. Physical inactivity is to date one of the major risk factors for developing non-communicable diseases, which are responsible for nearly 70% of all deaths. It is well documented in the literature that daily physical activity reduces the risk of non-communicable diseases. The level of physical activity differs between regions of the world and between the countries. Moreover, there are age and gender differences.

Keywords – Diseases, Mortality, Prevention, Health, Preservation

----------X----------

I. PHYSICAL ACTIVITY AND PUBLIC HEALTH:

It is commonly understood that there are important health benefits from physical exercise. Studies have shown for years that men, women and ethnically diverse people who are relatively active on a daily basis have lower mortality rates than inactive people. More data have recently been provided by researchers to affirm the importance of physical exercise in a number of health problems and the general benefit of public health. The research specifically indicates that physical exercise may be the key prevention action for many major health conditions, such as hypertension, dyslipidemia, diabetes, and cardiovascular disease.

To increase the perception of the health effects of physical exercise, the concept of physical activity must be clarified. Physical activity is a behavioral term often confused with training, health and/or physical fitness spending. A widely used physical activity description includes "any body movement generated by skeletal muscles resulting in energy expenditure". Physical exercise is commonly defined by activity mode or form (e.g. walking, running, sweeping), frequency (how often), length (minutes), and intensity (e.g. (light, moderate, vigorous). The energy expended to perform these physical activities is described and measured as the cost of energy for physical exercise or energy expenditure. It is referred to as exercise when a person takes part in a formal or systematic programme. Sufficient levels of exercise help in cardiovascular health preservation or development. The value of cardiovascular fitness as it contributes to health and mortality is supported by comprehensive literature.

Regular physical exercise has several proven health advantages that have led to many organisations issuing advice or instructions for physical activity. Guidelines are statements about the physical exercise type, strength, frequency and length designed to help people improve fitness, preserve or improve health, and minimise the risk of a number of chronic diseases. In 1995, a joint declaration on physical exercise and wellbeing was issued by the Centers for Disease Control and Prevention and the American College of Sports Medicine. This declaration offered concise details about the nature and severity of health promotion and disease prevention action. The guideline indicated that on most, but preferably all, days of the week, each adult should accumulate 30 minutes or more of moderate physical activity. Moderate physical activity was described as activity conducted at an intensity of approximately 3 to 6 METs (Metabolic Equivalent) or comparable to brisk 3 to 4 mph walking (Ainsworth, Haskell, et al., 1993).

More recently, the first standardised US government physical exercise recommendations were issued by the United States Department of Health and Human Services. Instead of the normal dosage, the "Physical Activity Guidelines for Americans" study presented the prescribed dose as a mild and/or intensive accumulation of activity

during the week. In total, adults should engage in at least 150 minutes of mild intensity exercise each week, 75 minutes of intense intensity activity, or a similar combination of further activity (300 minutes of moderate activity, 150 minutes of vigorous activity, or a combined equivalent), offering potential health benefits ('Advisory Committee Report on Physical Activity Recommendations., 2008). In addition, the study included additional recommendations for elderly adults, young people and other specific classes (e.g., persons with disabilities, during pregnancy, etc).

Physical inactivity presents a significant issue for public health. Nearly 60% of the global prevalence of individuals dropping below the prescribed physical activity thresholds is recorded ('WHO | Physical activity,' n d). The International Health Organisation (WHO) reports that physical inactivity-related chronic disorders such as cancer, diabetes, and cardiac failure are linked to 2 million deaths annually worldwide. Estimates of adults following physical activity requirements in the United States vary from a low of less than 5% to as high as 45%. Many adults can improve or preserve their health and reduce their risk of chronic diseases and premature mortality by engaging in daily physical exercise . Low daily physical activity levels leave many people at increased risk of chronic diseases associated with physical inactivity, such as asthma, dyslipidemia, insulin resistance (impaired glucose tolerance), tumours, coronary heart disease, stroke, type 2 diabetes, osteoporosis and osteoarthritis.

Differences in measuring approaches used to determine physical activity can be due to significant differences in the frequency of physical activity in cultures. Motion detectors and contextual tests are quantitative instruments used to evaluate physical activity . Objective measurements represent real movement and are often preferred by volume and/or speed and length to calculate overall movement. In science, clinical, and practise contexts, new accelerometers are being created and sold for use, but often little is understood about their validity and proof of reliability. The ActiGraph accelerometer is most commonly used as an objective indicator of physical activity, although there are still some concerns, including knowing the amount of hours a day that the monitor should be worn to correctly represent time spent at various intensities of motion.

II. ATTITUDE TOWARDS PHYSICAL ACTIVITY

During adolescence, an active lifestyle directly improves wellbeing, both during maturity and at old age. However, both children and adults have been less physically involved owing to the new way of life and technical advances (e.g. automobiles, elevators, computers and television). In some societies,' epidemic proportions' have been achieved by inactivity and the resulting obesity and diseases. New evidence reveals that Indians are genetically more likely than any other racial group in the world to have heart attacks. In contrast to Japanese, Chinese, Caucasians and Hispanics, one out of four Indian-Americans had elevated levels of lipoprotein. However, the unexpected spurt of heart attack among the young is not explained by genes alone. The response is lifestyle, in a phrase. As Enas explains, "Genetics load the gun, lifestyle pulls the trigger". India will have 10 crore or 60% of the world's heart patients by 2010, WHO predicts (India Today, June11, 2001). It demonstrates that the decreasing amount of exercise has the ability, directly as an individual risk factor and indirectly by increased obesity, to raise the burden of chronic illnesses in our society. In deciding the outcome of a national crisis, lifestyle decisions have never been more relevant.

In comparison, athletics and other events that selectively exclude children that are less qualified should not be over emphasized by the school curriculum. In addition, in schools the effects of fitness, the production and preservation of a balanced lifestyle and a constructive outlook towards life-long exercise conditioning should be encouraged. Yet, sadly, we do not have a standardised curriculum for Physical Education. Most children are not subject to any form of physical education curriculum in most colleges. The school authorities often make the decision and only give instruction to a few gifted children. The school authorities cannot be blamed for such a mentality, since there are several factors that lead to such a phenomenon: shortage of workforce, infrastructure services, lack of proper motivating methods, and failure to raise consciousness among parents.

Sufficient routine daily physical exercise is another significant component of avoiding chronic illness, aside from a safe diet and not smoking. Physical exercise is an important means for people to avoid chronic illnesses, and it can be a cost-effective way for nations to improve general health around the population. Regular physical exercise can also help create higher peak bone density, reducing the risk of osteoporosis for adults. Psychological well-being is encouraged by participation in physical activity, education and sport, and the therapeutic application of physical activity and recreation to enhance the mental health of youth extends beyond both conventional medical and mental health services. Available experience and empirical data indicates that daily physical exercise offers a wide variety of physical, social and mental health benefits to persons, both male and female, of all ages and conditions, including disabilities. Physical exercise favourably correlates with diet change techniques, discourages the use of cigarettes, alcohol and medications, helps prevent aggression,

increases cognitive capability, and encourages social interaction and integration.

One of physical activity's key attributes is that it helps individuals boost their physical health. Fitness is a state of well-being that encourages individuals to conduct active everyday tasks, thus reducing their risk of health issues. Cardio respiratory stamina, muscle strength, muscular endurance, stability and body structure are five essential components of fitness that have been shown to be critical for healthy health (percentage of body fat). The fundamental aspect of physical fitness related to health is that exercise has a beneficial effect on these components and that an appropriate degree of growth in the components listed above is important for positive health.

- In order to escape the increasing global burden of chronic diseases, adequate daily physical exercise is a major component.
- At least 60 percent of the global population does not meet the minimum recommendation of moderate intensity physical exercise of 30 minutes a day.
- In individuals who do not meet minimum physical exercise guidelines, the chance of developing cardiovascular disease raises by 1.5 times.
- Inactivity adds enormously to medical expenses - a record $75 billion in the US alone in 2000.
- Growing physical activity is a social challenge that involves a population-based, multi-sectoral, multi-disciplinary and culturally specific solution, not just an individual problem.

III. WHY IS REGULAR PHYSICAL ACTIVITY NECESSARY?

Physical inactivity is a major contributor to the global epidemic of chronic disorders, along with other primary risk factors. The risk of heart disease, stroke, breast and colon cancers is decreased by daily physical exercise. Via a variety of pathways, these rewards are mediated. In addition, physical exercise increases the absorption of glucose, decreases body fat and lowers blood pressure; these are the key aspects in which the likelihood of CVD and diabetes is believed to be minimised. It may also help control the symptoms of these diseases and mitigate them. Via its effects on prostaglandins, decreased intestinal transit time, and higher antioxidant levels, physical exercise can also decrease the risk of colon cancer.

Physical exercise is associated with a low chance of developing breast cancer, which may arise from oestrogen metabolism effects. Participation of physical exercise may also boost the fitness of the musculoskeletal, regulate body weight, and decrease stress symptoms. A variety of studies have identified the potential positive effects on musculoskeletal disorders, such as lower back pain, osteoporosis and slips, as well as on obesity, depression, anxiety and stress.

There are also economic advantages to physical exercise, especially in terms of decreased health care costs, improved productivity, and healthy physical and social environments. The direct costs of inactivity are immense, according to evidence from developing countries. In 1995, the expenses associated with inactivity and obesity accounted for about 9.4% of the national health budget in the United States. According to 1998 results, physically active individuals in the USA save an average $500 per annum in health care costs. Inactivity alone may have added as much as $75 billion in the year 2000 to US medical expenditures. In Canada, approximately 6 percent of overall health care expenses are paid for by physical inactivity. There is not much data available about the cost of inactivity in India.

Progress must be a culmination of all actions and productive findings must benefit from the utilisation of capital. The research scholar felt the need to conduct a research project to understand the status of priority health risk behaviour, which leads to the leading causes of morbidity and mortality among adolescents in West Bengal.

1. DIETARY PRACTICE

Dietary habits apply to the food intake preferences of an organism. Dietetics is the synthesis, implementation and communication of food, diet, social, business and basic science concepts to attain and sustain the ideal nutritional status of people through the creation, provision and management in a range of settings of appropriate food and nutrition services.

A dietary supplement is an oral substance containing a "dietary ingredient" meant to supplement the diet. In these products, the 'dietary ingredients' may include: vitamins, minerals, herbs or other botanicals, amino acids, and enzyme, liver, tissue, glandular, and metabolite substances.

2. HEALTH RISK BEHAVIOUR

Promoting health is described as "the process of allowing individuals to increase control over and improve their health." In keeping with the concept of health in the WHO Constitution, health promotion emphasises on physical, emotional and social well-being, not just sickness or infirmity (1). The implementation of the principle of health promotion and education needs intervention both on risk behaviour and on the risk associated with

people's living conditions. The more people are health-literate, the more they are likely to maintain their health. To recognise the predisposition of people to such risk factors, behavioural experiments are important and can be the basis for the implementation of health promotion and educational strategies. It is crucial that people live in environments conducive to health, in addition to improving health awareness, and that this healthier atmosphere is enabled by healthy public policies that mitigate risk exposure. The WHO Field Branch, in partnership with WHO headquarters and the Centers for Disease Control and Prevention (CDC), Atlanta, is conducting a Global School Wellness Assessment in order to determine behavioural risk factors.

The work on reducing risks will focus on actions to:

- reduce physical inactivity
- regulate exposure to marketing of food and non-alcoholic beverages to children
- promote a healthy diet

The growing prevalence of diabetes and obesity in India can be attributed to rising levels of physical inactivity, at least in part. Nevertheless, there has been no national research in India on rate of physical activity affecting both urban and rural areas in all states of India.

REFERENCES:

1. Ainsworth, B. E., B. Sternpeld, M. T. Richardson, and K. Jackson (2000). Evaluation of the Kaiser Physical Activity Survey in Women.Med. Sci. Sports Exerc. 32 (Suppl.), 2000.
2. Annan KA (2001). We the Children: Meeting the Promises of the World Summit for Children. New York, NY: UNICEF.
3. Baceviciene M, Luksiene DI, Cesnaitiene VJ, Raubaite S, Peasey A, Tamosiunas A (2013). Dose-response association between physical activity and metabolic syndrome. Cent Eur J Med.; 8(2): PP. 273-82.
4. Benchun Tian (2003). Global School Based Student Health Survey-China (Beijing) 2003 Fact Sheet, China CDC, Beijing, China.
5. Catherine S. Berkey et. al. (2000). Activity, Dietary Intake, and Weight Changes in a Longitudinal Study of Preadolescent and Adolescent Boys and Girls, Pediatrics Vol. 105 No. 4, p. e56
6. Clark DJ, Frith KH and Demi AS (2004). the physical, behavioural and psychosocial consequences of Internet use in college students, Computer Information Nursing; 22: PP. 153–61. [PubMed]
7. Corbin, C.B. (2002), Physical education as an agent of change, Quest, 54, PP. 182-195.
8. David Simmons, Bernhard H Breier, Adult obesity and growth in childhood Department of Health Manila, Philippines.

Corresponding Author

Matin Pramanik*

Research Scholar, Department of Physical Education, Sri Satya Sai University of Technology & Medical Sciences, Sehore, M.P.