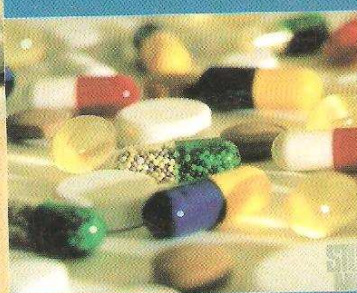


# Matters Arising in Health Education



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**PHYSICAL FITNESS: A SIGNIFICANT FACTOR IN  
INDIVIDUAL'S HEALTH PROTECTION  
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The issue of physical fitness as a means of health promotion for individuals is not a new concept. According to Otono (1994), in the technologically advanced countries, fitness has become a culture. The people understand the values of fitness and can determine that it is good for them, they do not require government intervention or television push before they engage in Physical activities.

It is obvious that good health is very important for man's greatness need for survival (Moronkola, 1997). Hence, the need to keep fit in order to be able to maintain good health and to cope with the daily demands of life cannot be overemphasized. Nowadays there is a general awareness regarding the role of physical exercise in the prevention of coronary heart disease, hypertension, obesity and hypokinetic disease such as low back pain and other muscular-skeletal problems (Danladi, 1997).

Being physically active should be as natural and necessary as eating and sleeping. This was true many years ago, when most people had to use physical labour in their daily lives, unlike today when much of these works are done by machines. Okuneye (2002), asserts that physical activity behaviour of people have been tremendously altered due to modernization or development in the society. This can be traced to contributions of advances in technology to sloth resulting from industrial revolution in the 19<sup>th</sup> century. Since this time, the need for man to be physically active in order to earn a living has continued to decrease.

This is because powered vehicles and various machines are used to reduce the labour required for cleaning, lifting, construction and maintenance work. And lately, the advances in computer and communication technology have added to reduction in daily expenditure of occupational tasks for many people.

Okuneye further explains that the physical activity behaviour has also been affected by the way many people spend their leisure particularly television viewing, Quoting Neilson (1990), Okuneye stresses that watching television has been a major past-time for many people especially children, adolescents and young adults.

Many adults have also adopted regular attendance of social engagements and parties where extra foods and drinks are taken on daily basis. And this go further to compound their health problems, coupled with the fact that many people now live sedentary life-styles. Based on all these, there is need for individuals to plan towards achieving considerable levels of physical fitness to promote and protect individual's health.

The essence of this discussion is to review the relationship between physical fitness and sound health, and how to work towards achieving physical fitness.

### **Concepts of Health**

In the past, health meant only the absence of disease or illness (Getchell, Pippin & Varnes, 1987). Today, health has a broader meaning; Health according to World Health Organization (WHO Alama-Ata declaration in 1978) is a complete state of physical, mental and social well-being, not merely the absence of disease or infirmity (O'Neill 2000).

One can understand the need for this broader definition based on the fact that what makes up health today is quite different from what it was centuries back. The major causes of health problems and death in those days were diseases spread by bacteria and viruses. Today, many of those diseases can be prevented or cured by improved medicines and methods of sanitation. As the world advances, new cases of health problems are coming up. There are several environmental health hazards that call for urgent attention.

However, Getchell, Pippin and Varnes (1987) state four major factors (identified by the United State centers for disease control) that determine individuals health. These factors are personal health behaviour, biological influences (such as heredity), the condition of the physical environment, and the quality of health care services. Particularly, about personal health behaviours that promote good health and tend to increase average length of life. These behaviours include:

- i) Sleeping seven to eight hours daily
- ii) Eating breakfast almost everyday
- iii) Rarely eating between meals
- iv) Maintaining normal weight
- v) Not smoking cigarettes
- vi) Drinking alcohol in moderation, or not at all
- vii) Getting regular physical exercise.

Those who practice most or all of these behaviours are said to be in better physical and mental health than those who follow a few or none. And people who are in good physical shape are better able to handle the pressures in their lives.



## **Concept of Physical Fitness**

An attempt to define physical fitness is a most provocative task. It is almost, if not entirely impossible, to find a definition which will satisfy everyone (Otiono, 1994). The disagreement about what to include in physical fitness is the major reason for the variations in the fitness event measurements. Hence, different professionals see physical fitness from different perspectives. Regardless of this fact most (if not all) definitions of physical fitness agreed that it is the ability to carry out daily tasks with vigour and alertness, without undue fatigue, and with ample energy to enjoy leisure time pursuits and to meet unusual situation and unforeseen emergencies.

Physical fitness is made up of health and performance related components (Hockey, 1993; O'Neill, 2000). The health related components refer to those factors that ensure the development and maintenance of health and with the increase of the functional capacity of the body. They include aspects of physiological and psychology functioning, which offers protection against degenerative types of disease. (O'Neill, 2000) includes the following in the list of such diseases: Coronary Heart Disease (CHD), hypertension, obesity, low back pain and other muscular skeletal disorders or hypokinetic diseases usually associated with low level of every expenditure common with sedentary individuals.

On the other hand, the performance-related fitness has to do with those qualities of functions that enable an athlete to compete effectively with greater power, speed, agility, coordination, balance, good reaction time etc. These are more peculiar to athletes with high performance and even then, it is specific to each event.

According to O'Neill (2000), it is logical to expect the health related fitness to be developed first before the performance aspects, because it is only the healthy individual who can complete. And for the fact that we are concerned about the health protection of every individual in the society, our emphasis shall be on the health-related fitness of which components include: cardiovascular functions, muscular endurance, strength, body composition and flexibility.

### **Cardiovascular Functions:**

This is to what extent the cardiovascular system can endure physical stress. And by its endurance, we mean the ability of the heart, lungs and blood vessels to send fuel and oxygen to the body's tissues during long periods of vigorous activity. It is the trait of cardiovascular system that enables a person to continue a vigorous activity over a period of time, to resist fatigue. Getchell, Pippin and Varnes (1987) describe cardiovascular function as the single most important component of fitness because of its significant effect on total health of individual. High endurance shows that heart, lungs and muscles can work efficiently for a long time without getting tired.

**Muscular Endurance:**

This is the ability to apply strength over a period of time. It includes the ability of the muscles to work over and over again and to hold a contraction over a period of time.

Many day-to-day activities require endurance, therefore the need for muscles to keep working continuously against resistance without or with less fatigue.

**Strength:**

Strength is often defined as the ability of the body, or a segment of it, to apply force. It is considered as the contractile force of a muscle or group of muscles. But based on the definition of strength and the methods used to combined contractile forces of the muscles causing the movement, the mechanical ratio of the particular body levers invited, and the ability to coordinate the agonistic muscles into one unified force working with the antagonistic and stabilizer muscles.

Lifting a weight and pushing against a wall are acts of strength. The greater weight a muscles can lift the greater its strength.

**Flexibility:**

Adequate flexibility allows for a full range of motion in the joints and is often limited by the amount of extensibility of the muscles, tendons and ligaments. A frequent cause of improper movement is poor flexibility. Flexibility therefore, is the ability to bend joints and stretch muscles through a full range of motion.

All movements require some degree of flexibility. Joints and muscles that are not flexible limit movement and add to the risk of injury (Getchell, Pippin and Varnes, 1987) and other related health problems.

**Body Composition:**

Body composition is described as the amount of fat tissue relative to the other tissue in the body, that is percentage of fat tissue to lean tissue. The body composition is not based on the body weight. There are several athletes that weigh significantly than non-athletes. But their body fat percentage is less to the total body tissue proportion, unlike the obese non-athletes. Studies (Danladi, 1997; Awopetu, 2000; Okunye, 2002;), have shown that excess fat in the body predispose one to dangerous diseases and chronic health condition. It should be appreciated that physical fitness is relative. The same degree of physical fitness is not required for every one, but there are general standards.

## **Benefit of Fitness to Health**

It is erroneously assumed by most people that physical fitness is the requirements for athletes or those involved in sports, and not needed as such by those who are not in this area of profession. This is a serious misconception.

Orunaboka and Uduk (1994) opine that the demands of the modern complex society make it increasingly necessary for citizens, regardless of gender to have the capacity for physical endurance. The benefit of physical fitness to individuals' total health as identified by Getchell, Pippin and Varnes are categorized into four groups, they are hereby summarized as follows:

### **A) Improved Appearance:**

- i) Maintenance of good muscle tone
- iii) Maintenance of good posture
- ii) Keeping off the excess fat of the body; and

### **B) Improved Body Functions**

- i) Strong bones and strengthened ligaments.
- Ii) Provision of strength and muscular endurance
- iii) Keeping of muscles and joints flexible
- iv) Improvement of digestive and excretory functions
- v) Sharpening nervous control
- vi) Reduction of chances of injury and
- vii) Provision of greater energy

### **C) Improved Body Physiology**

- i) Reduction of backaches
- ii) Enhancement of cardio respiratory efficiency
- iii) Lowering of blood pressure

- iv) Increment of resistance diseases; and
- v) Reduction in the risks of heart disease.

#### D) Improved Mental, Social and Emotional Well

- i) Improvement of self-image being.
- ii) Reduction of stress
- iii) Improvement in alertness
- iv) Enhancement in social involvement; and
- v) Relief of mental depression.

Studies have revealed a low level of physical fitness among most Nigerians. Lafinhan (1994) quoting Nwegbu (1987) expressed that “There is no doubt that Nigerians are weak in many components of physical fitness. Some say they are weak in the arms, upper trunk, including the shoulder girdles and the abdominal muscles. Others say they are deficient in general endurance. Many young men and women cannot walk even a kilometre; they always travel either by bus or taxis.

Since the health of individuals is the health of the nation, there is no need denying the fact that each individual regardless of sex, age normal or handicapped requires optimum level of physical fitness. How then can individuals achieve the optimum physical fitness level?

#### **Road to Optimum Physical Fitness Level**

Engagement in sports, games and various organized physical activities and exercise have been embraced all over the World for their unique contributions to physical fitness of individuals. According to Oloyede (1991), the World Health Organization (WHO) on several occasions has emphasized the close relationship that exists between sports and health development as an essential factor for good health and well-being.

To improve physical fitness, one must work the muscular and cardiorespiratory system at higher-normal levels. This is done by regularly imposing stress that is greater than normal on the body or muscle. This in turn promotes fitness and good health status.

For acquisition and maintenance of physical fitness, it is advisable that individuals engage themselves in regular physical activities in the morning and evening times when free from works; and during weekends and holidays.

These activities could be in form of physically demanding sports and games such as soccer, tennis, tables tennis, squash racket, volleyball, badminton basketball and soon.

Such activities could also be in form of exercise which may be programmed like circuit training. Circuit training means programme of activities, which consists of a number of stations where the individual performs a given exercise, usually within a specified time. Once the exercise is completed in one station, the individual moves rapidly to the next station, performing another exercise also within a prescribed period. The circuit is completed once the person performs the exercise at all stations. This could be done for once or repeated for number of times.

As suggested earlier, exercise could come first in the morning, immediately after bed, and also in the evenings after work. Below are some suggested stretching exercises as prescribed by Fox (1979). They could be performed at either time, but preferably in the morning immediately after bed.

### **1) Back Stretching:**

Lying on the back, with the arms extended to the sides, bring the knees toward the chin as far as possible without raising the arms off the floor. Hold position for 10-15 seconds, relax for 5-10 seconds, then repeat.

### **2) Hamstring Stretch:**

Sitting on the floor with legs spread. First reach for one foot, holds with both hands for 5-10 seconds, then reaches for the other leg and hold. Each time you reach, attempt to touch and hold the head and chest as closely to the thigh of the leg you are trying to hold at the foot.

### **3) Groin Stretch:**

Sit on the floor with the soles of the feet touching in the front of you. Gradually push down on the knees as far as possible. Hold the final stretch position for 10-15 seconds. Each day try to push the knees closer to the floor.

### **4) Spine and Waistline Stretch:**

Sit on the floor with the right leg straight and cross it with the left leg, placing the left foot flatly on the floor. With the right hand, reach around the left leg toward your left hip. Put the left arm directly behind you and slowly turn the head. Sit up straight looking over the left shoulder. Hold for 5-10 seconds then stretch the other side by crossing the right leg over the left.

### **5) Quadriceps Stretch:**

Lying on your left side, flex the knee of your right leg and grab the ankle with the right hand.



Gradually move the hips forward until a good stretch is left on the thigh. Hold for 5-10 seconds and repeat for the leg by lying on your right side.

#### **6) Abdominal Stretch:**

Kneel by placing the hands and knees on the floor. Lean back onto the heels, extend the arms and place the chest on the floor. Hold for 10-15 seconds, relax and then repeat.

#### **7) Hip Stretch:**

Lie on the back and raise the feet straight into the air. Supporting the hips with the hands. Hold for 5-10 seconds, change the leg and do the same. Relax and repeat.

#### **Conclusion**

Health is commonly said to mean 'wealth' and to be wealthy is to be happy. It is therefore essential for everybody to maintain an appreciable level of health. To achieve this, individuals should be able to expend anything affordable in form of physical exercise so as to keep fit and stay healthy. Making exercise a regular part of ones life makes it possible to reach the overall fitness goal.

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