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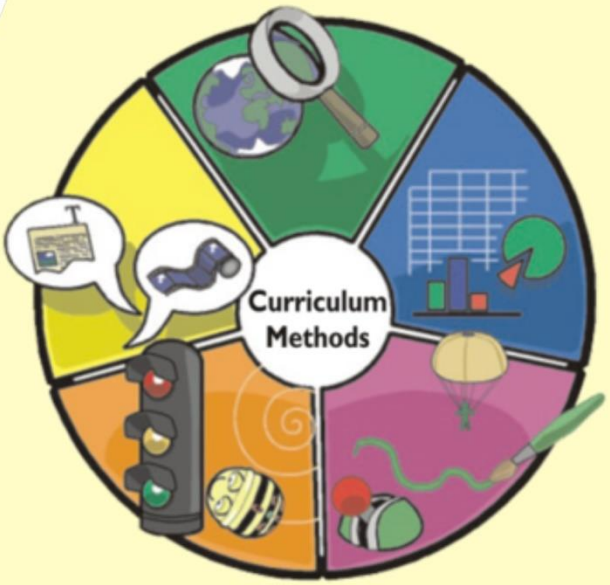

Primary School Physical and Health Education and Curriculum Methods

Module 3

PED 271 (Primary School Physical and Health Education and Curriculum Methods) Module 3

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Unit 1 Features of the School Physical and Health Education Curriculum

1.0 Introduction

The school health education programme is central to the essence health instruction in the school system. In this unit, we shall examine the various features of the school health programme. These features include health education, school health services, safe and healthful school environment, physical education, nutrition services and counselling, psychological and social services .As you read on, you will find that health education curriculum has inherent benefits.

2.0 Objectives

At the end of this unit, you should be able to:

- explain the basis of the health education curriculum
- list the features of the school health education programme.

3.0 Main Content

3.1 Health Education

Health education in the school context refers to a planned and well organized curriculum that addresses the many dimensions of health. Such dimensions include the physical, mental, emotional and social aspects of the individual or student life. The health education curriculum is systematic in its approach and it is basically to motivate and encourage students to better or improve their health, prevent disease and reduce health related risk behaviours. Health instruction is an activity based exercise and it is only a qualified teacher with knowledge of health education that should impact health knowledge to students.

3.2 School Health Services

School health's services are expected to appraise, protects and promote the health of students. Highlights of school health services include:

- access to referral primary health care services
- ensuring adequate use of primary health care services
- prevention and control of communicable diseases and other health conditions
- management of chronic infections/diseases
- provision of emergency care to the injured
- optimum sanitary conditions for a safe school facility and school environment

- counselling opportunities for the promotion and maintenance of individual, family and community health.

3.2.1 Safe and Healthful School Environment

A safe and healthful school environment refers to an environment which attends to the physical, aesthetic surrounding. It also refers to the psychological climate and culture that ensures the health and safety of students and staff. The physical environment includes the school building and the areas surrounding it, biological or chemical pollutants that might induce harm are some examples of factors that influence the physical environment.

However, the psychological environment constitutes the interrelatedness of physical, emotional and social conditions that affects the well-being and productivity of students and staff.

3.3 Physical Education

Physical education is a carefully designed curriculum that provides cognitive, affective and psychomotor related activities. In physical education curriculum, teachers and learners are provided with learning experiences in a variety of activity. These include basic movement skills, physical fitness, rhythms and dance, games, teams, dual and individual sport tumbling and gymnastics and aquatics.

Quality physical education should promote in a systematic manner, a variety of planned physical activities, and the physical, mental, emotional and social development of students. These activities should be promoted in such a way that all students enjoy and can pursue the activities throughout their lives.

3.4 Nutrition Services

Nutrition services are those services that provide individual students with nutritional information/knowledge, and balance. Nutrition services take into consideration the health and nutritional needs of all students. The school nutrition programmes offer opportunities for students to experience learning in a standard classroom. Nutrition and health education can be combined in such a way as to serve as resource linkages with nutrition – related community services. Nutrition services can be provided by qualified child nutrition experts.

3.5 Counselling, Psychological and Social Services

Counselling, psychological and social services are services that provide wide range of individual and group assessments, interventions and referrals. These services attend to the mental, emotional and social health of students. Organizational, assessment and consultation skills of counsellors, psychologist and social workers are needed in order to contribute to the overall health of students and to the maintenance of a safe and healthful school living.

4.0 Conclusion

This unit addresses the features of the school health education curriculum. The features include health education, school health services, safe and healthful school environment, physical education, nutrition services and counseling, psychological and social services.

These programmes have far reaching implications on the all-round growth and development of students.

5.0 Summary

The unit discussed in details the several features of the school health education curriculum. It went further to give a detailed analysis of each of these features and what they represent in the school health education curriculum circle of learning. The primary aim of the health education curriculum is to ensure that learners and school personnel are positively affected in behaviour, attitude, habits, life styles, etc.

6.0 Self-Assessment Exercise

1. Explain the concept of physical education.
2. Discuss how a safe and healthful school environment contributes to effective learning among learners.

7.0 References/Further Reading

Allensworth, D. (1993). "Research Base for Innovation Practices in School Health Education in Centre for Disease." *Centre for Disease Control* (CDC) (1993). Comprehensive School Health Education Programmes: Innovative Practices and Issues in Setting Standards. Atlanta GA: Centre for Disease Control and Prevention, 45-61.

Federal Ministry of Education (2004). *National Policy on Education* (Revised). Lagos, NERDC, 4-20.

Unit 2 Physical Fitness in the Primary School

1.0 Introduction

In this unit, you will learn about the meaning of physical fitness, cardiorespiratory endurance, muscular strength, flexibility, body composition.

2.0 Objectives

At the end of this unit, you should be able to:

- discuss the importance of physical fitness
- examine the meaning of flexibility
- list the different types of fitness.

3.0 Main Content

3.1 Physical Fitness

Physical fitness is a set of physical activities that allows the body to respond or adapt to the needs and stress of physical effort. Physical fitness allows the individual to perform some moderate-to-vigorous levels of physical activity without being tired. The benefits inherent in physical activity are extensive. For example, physical activity enhances physical and mental wellness with far reaching implications. When one is physically fit, everyday chores or tasks such as lifting things becomes easy, in addition, physical fitness helps people to reduce cases of heart disease, cancer, high blood pressure, diabetes and other degenerative diseases.

The five major components of fitness are:

- cardiorespiratory endurance
- muscular strength
- muscular endurance
- flexibility
- body composition.

3.2 Cardiorespiratory Endurance

The ability to perform or sustain a prolonged, large-muscle and variety of exercises at moderate to high levels of intensity is referred to as cardiorespiratory endurance. Measuring cardiorespiratory endurance depends on factors such as the health state of the lungs and their ability to deliver oxygen to the blood stream, the hearts capacity to pump blood, the nervous system and blood vessels ability to regulate blood circulation, the muscle's ability to generate power and the capacity of the body's chemistry to use oxygen to the fullest.

Cardiorespiratory endurance is a critical component of health – related fitness because the functioning of the heart and lungs is essential to overall wellness. However, cardiorespiratory endurance is developed by rhythmic movements such as walking, jogging

cycling and aerobic dance. When the cardiorespiratory levels are low, the heart would have to work very hard during normal daily activities and may not be able to work hard adequately to sustain high intensity of physical activity in an emergency. Also, as the cardiorespiratory fitness improves, the heart starts to function adequately. The heart does not have to work as hard at rest or during period of low levels of exercise.

3.3 Muscular Strength

This refers to the amount of force a muscle can produce with a single maximum effort. Muscular strength requires strong, powerful muscles in order to produce smooth and easy performance of everyday activities.

Furthermore, healthy muscles help keep the skeleton in proper alignment, preventing back and leg pain and giving the necessary support for good posture. Recreational based activities are facilitated due to muscular strength. Muscle tissue is a critical part of the overall body composition thus greater muscle mass makes it possible for a higher level of metabolism and greater energy use body help to maintain a healthy body weight. Muscular strength can be achieved by regular training with weights or by using the weight of the body for resistance during calisthenics exercises.

3.4 Muscular Endurance

This refers to the ability of an individual to sustain a given level of muscle tension, that is, to hold a muscle contraction for a long interval of time. The importance of muscular endurance includes food, posture and injury prevention. Muscular endurance can be developed by stressing the muscles with a greatly load than they have being conditioned to. Again, the extent to which strength or endurance develops depends on the type and amount of stress that is involved.

3.5 Flexibility

The ability to move the joints through full range of motion is called flexibility. Physical exercises can help ensure of normal range of motion. Inactivity can cause the joints to become stiffer with age and stiffness can make elderly people to assume unnatural body postures, and it can lead to neck, shoulder and back pain.

3.6 Body Composition

The proportion of fat and fat free mass (i.e. muscle, bone and water) in the body is called body composition. A healthy body composition involves a high density or proportion of fat – free mass and an acceptably low level of body fat. An obsessed person is more vulnerable to health problems such as heart disease, high blood pressure, stroke, joint problems, diabetes, cancer, back pain and gallbladder.

4.0 Conclusion

This unit examined physical fitness. Major highlights in this unit include cardiorespiratory endurance, muscular strength, muscular endurance, muscular flexibility and body composition. Physical fitness is central to wellness hence it is importance.

5.0 Summary

This unit discussed the implications of physical fitness. These include; the promotion of physical and mental wellness. When one is physically fit, everyday tasks becomes easy. Physical fitness helps people to prevent heart disease, cancer, high blood pressure, diabetes and other terminal diseases. Therefore five components of fitness, these include; cardiorespiratory endurance, muscular strength, muscular endurance, flexibility and body composition.

6.0 Self-Assessment Exercise

1. Discuss the importance of physical fitness.
2. List and explain two components of physical fitness.

7.0 Reference/Further Reading

Insel, P. M. & Roth, W. (2004). *Core Concepts in Health, Ninth Edition Update.* McGraw-Hill Publishing Company.

Unit 3 Drugs, Sports and Importance of Recreation and Leisure Activities

1.0 Introduction

In this unit, you will learn about the history of doping, doping substances, the health implications of doping and the risk factors associated with doping. We shall also review the importance of recreation and leisure- based activities, ways through which recreation and leisure activities can be promoted in the society. It is envisaged that knowledge acquired will help to create the needed awareness acquired by the students *vis-à-vis* participation in recreation and leisure -based activities.

2.0 Objectives

At the end of this unit, you should be able to:

- narrate the history of doping in drugs
- list the different types of doping substances.
- review the benefit of recreation activities
- discuss the importance of leisure based activities.

3.0 Main Content

3.1 The History of Doping

The history of the use of drugs in sports dates back to the medieval times. It is on good authority that the ancient Greeks used substances that affect their performance in sports. The Gladiators of circus used substances that influenced their overall performance. Similarly, ancient Greek Olympians used herbs and mushroom to enhance performance (Asken, 1988). The first reported case of drugs in sports was the use of anabolic steroids involving a horse named Holloway.

In Fair's (1988) account, the horse prior to the infusion of testosterone had diminished in both capacity and ability. Several efforts to race failed but after the administration of the drug in February 1941 and several months of training, the horse won a number of races and established a speed of 2 minutes 10 seconds at age of 19. Use of drugs in sport is a common phenomenon.

3.2 Doping Substances

Drugs that are commonly used in doping include:

- Anabolic steroids
- Beta Blockers
- Stimulants

- Narcotics
- Diuretics
- Peptide hormones and analogues

Drugs subject to restrictions in sports include:

- Marijuana
- Corticosteroids
- Alcohol
- Local anaesthetics.

3.3 Health Implications of Doping

The use of banned drugs to enhance performance in sports is gaining popularity among sports men and women. It is a dangerous trends no doubt and it poses a lot of threat to the health of those who use these drugs. Observations and autopsies on athletics that died prematurely form doping reveal that drugs use can affect the individual athletic physiologically.

For example, the effects of steroids on athletics have shown that the secondary sex characteristics in men are severe. In men, changes include oily skin, changes in hair formation, testicular atrophy, the development of a high – pitched voice and gynecomastia and in women, these effects include, virilism, hirsutism; the appearance of a male pattern boldness, deepening of the voice, atrophy of the breasts and the enlargement of Adam's apple.

3.4 Risk Factors in Doping

Risk factors in doping can be categorized into, physical, psychological and emotion. Psychoactive drugs have a lot of physical effects even beyond imagination. These effects include: alteration of consciousness, heart failure and risk of potential fatal overdose.

3.5 Importance of Recreation and Leisure -Based Activities

Recreation activities are those activities one performed voluntarily during his/her leisure hour or time, they are not competitive in nature but skills acquired can be used for other sports**.**

Most major health problems in the society today have been attributed to lack of exercise or inactivity (Murray 2002). Diseases common in our society such as hypertension or high blood pressure, stroke, obesity, diabetes, low back pain, cancers, insomma, paralysis, and other diseases have been connected with lack of physical activity and recreation. There is abundant research finding that justified the need for recreation based activities and increasing individual levels of recreation can promote health and well -being.

The general objectives of recreation programme include:

- facilitating healthful relationship

- promoting healthful situation
- enhancement of wellness behaviours
- promoting resiliency.

Recreation activities can be helpful in-terms of providing the potential of adding more years to one's life, longevity depends on recreational interests and factors. Furthermore, recreational activity can bring about self-efficiency, good health, wellness and resiliency, good recreational activities can be leisure based and it can contribute cognitive, emotional, social and socialization aspects of an individual life. Recreation is good and it can promote life-long fitness and the ideally happy and healthy person is the one who has recreational pursuits. Recreation works with vigour and pleasure with less fatigue.

3.6 Recreational Activities

Recreation can be done based on one's own convenience and it can promote health and wellness. The following physical activities can be engaged for leisure purposes:

- walking home after close of work
- jogging at moderate level
- swimming but there must be a lifeguard or lifebuoy.

4.0 Conclusion

This unit addressed the issue of drugs in sports. It presented on overview of the history of doping substances, health implications of doping and the risk factors in doping drugs in sports is an age-long practice and efforts to discourage it should be sustained by sports men and women. This unit also explained that the major health problems in the society today have been attributed to lack of exercise or inactivity and listed some recreational activities to curb most health problems.

5.0 Summary

In this unit, the phenomenon of doping is a steady increase and it is of a global concerns. The use of natural talents and abilities should be encouraged and the spirit of sportsmanship should be imbibed by all who participated in sporting activities. The rule of fair play should be applied always and sports men and women should ensure that winning alone is not the ultimate but participation and friendship should also be internalized.

6.0 Self-Assessment Exercise

1. Review the history of doping.
2. Name five doping substances.
3. List three recreational activities.

7.0 References/Further Reading

Asken, M. (1988). *Dying to Win the Athlete Guide to Safe and Unsafe Drugs in Sports*. Washington D.C.: Acropolis Books.

Fair, J. (1988). Olympic Weight-lifting and the Introduction of Steroids: A Statistical Analysis of World Championship Result.

Unit 4 Bones, Muscles Injuries and Disorders

1.0 Introduction

In this unit, you will learn the nature and functions of bone, types of bone and the importance of studying bone. The body is made up of bones. Bones are important structures. This unit will also review the types of muscle. Attached to bones are muscles. There are basically three different types of muscle tissue found in the human body, these include skeletal muscles, smooth muscles and cardiac muscles. The study of bones and muscles is important because they are part of physical exercise and they require lifelong care. An individual is able to walk, run, kick and jump because muscles pull against bones.

Muscles support movement activities in man. Thus walking, lifting, talking and breathing are accomplished by muscles. Muscles have four basic functions namely; maintenance of posture, production of heat and giving the body the required shape.

2.0 Objectives

At the end of this unit, you should be able to:

- describe nature and function of bones
- explain how bones changes with age
- list the types of muscles and their functions
- list the different types of muscle injuries
- examine the remedies for muscle injury and disorder.

3.0 Main Content

3.1 Nature and Function of Bone

Bones are living organs. They are made of cells; they grow, repair and replace themselves. In addition, bones also contain minerals which are non-living materials. Bones make up the human skeleton and they are different in size and shape but they serve the same purposes. Bones could be as strong as iron. They alone repair themselves and change in size and weight as the body grows. The major function of bones is to give structure of the body, protect the delicate parts and supply important minerals to the body. In addition, bones can store minerals until other parts of the body need them.

3.2 Types of Bones and Bone Formation

The types of bones in human body include the following:

Long bone: this is a bone with large ends and a narrow middle. The narrow part of the bone between the bone ends is called the shaft.

Periosteum: this is what a type of bone covered with a strong membranes

Shaft: the narrow portion of the bone between the layers of tissue called the shaft.

Compact bone: situated under the periosteum is a layer of tissue called compact bone.

Haversian system: this is a network of blood vessels that runs through canals in the layer of compact bone.

Collagen: this is a strong flexible material provided by bone cells. Collagen is held together by minerals.

Bones formation can be affected by age. For example, the bones of a baby are mainly affected by cartilage.

3.3 Cramp

Muscles sometimes suffer damages but they have the ability to heal themselves. There are many muscle injuries and the commonest is a CRAMP. A cramp is a prolonged muscle contraction causing pain. Muscle cramp may occur when the muscle is overworked or overstretched. However, gentle stretching and massaging of the muscle may bring about relieve of the cramp.

3.4 Muscle Strain

Muscle strain is also called pulled muscle and it usually occurs due to severe overworking the muscle. Sometimes, strain is confused for sprain but they are not the same. Sprain is an injury of the ligaments and tendons in a joint and no permanent damage result from a sprain but the muscle may continue to be sore. Strain usually occurs to large muscle such as those of the high and calf muscles. Treatment of muscle strain consists of ice packs application and allowing the muscle to rest. After 48 hours heat may be applied.

3.5 Torn Muscles

A torn muscle can occur due to heavy lifting or a sudden shock or pull. Rupture tendons can also lead to torn muscle. However, treatment of torn muscle is similar to that of muscle strain, Heat and rest. A torn muscle is a severe injury.

3.6 Tendonitis

Just the way muscles can be damaged by overwork or injury the same way tendons can be damaged. When a tendon becomes irritated and swollen is called tendonitis. Tendonitis can be troublesome because its healing process is slow. Rest is the only cure for tendonitis.

3.7 Hernia

This occurs when a portion of the intestine pushes itself through the layer of skeletal muscles in the abdomen or groin. Hernia has been traced to the weak spot in the layer of the muscle. Also, hernia can occur when a person lifts heavy weight but can also happen when a person coughs or sneezes violently. Hernia is common to people who have little strength and muscle tone. Surgical correction is often required for cases of hernia.

3.8 Muscular Dystrophy

Many diseases affect muscles. One of such disease is muscular dystrophy. It is a hereditary disease that gradually destroys muscle fibers. Victims of muscular dystrophy can occur from paralysis of the muscles that control breathing or failure of the cardiac muscle. Muscular dystrophy has no known cure.

4.0 Conclusion

This unit examines nature and functions of bone, types of bone, muscle injuries and disorders. The unit was able to explain that bones make up the human skeleton and they are different in size and shape but they serve the same purposes and some athletic injuries resulting from muscle and tendon problems and the means through which the injuries can be corrected.

5.0 Summary

This unit discussed some common muscle injuries and disorders. It went further to highlight the diseases that affect the tendons. Also, the importance of rest was discussed as one of the ways to prevent muscle injuries and disorders.

6.0 Self-Assessment Exercise

1. List three muscles injuries and disorders
2. Explain how these injuries and disorders can be treated/corrected.

7.0 Reference/Further Reading

Houghton, Mifflin (1989).Health Teacher's Edition, Revised Edition. Hought Mifflin Company, USA, Page 206-213ANC.