

Review article : The Role of Physical Exercise in Diagnosis of Urinary Schistosomiasis

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Abstract

Background:

Physical exercise is any bodily activity that promotes or maintains physical fitness and overall health and wellness.

Justification:

There is no published data about the role of physical exercise in the diagnosis of diseases.

Objective:

To introduce the important of physical exercise in the laboratory diagnosis of diseases.

Material and method

A review article discussed about the importance of physical exercise in diagnosis of diseases.

Discussion

Physical exercise is an important activity which prevent diseases, aging and help to diagnose diseases, such as urinary schistosomiasis.

Conclusion:

Studies must be done to know more about the importance of physical exercise in diagnosis of diseases.

Keywords: physical exercise, diseases, diagnosis

Introduction

Physical exercise is the performance of some activity in order to develop or maintain physical fitness and overall health. Frequent and regular physical exercise is an important component in the prevention of some diseases such as heart disease, cardiovascular disease, Type 2 diabetes and obesity.

Exercises are generally grouped into three types depending on the overall effect they have on the human body: Flexibility exercises such as stretching improve the range of motion of muscles and joints; aerobic exercises such as walking and running focus on increasing cardiovascular endurance; and anaerobic exercises such as weight training, functional training or sprinting increase short-term muscle strength. ⁽¹⁾

The Benefits of Exercise:

- Exercise increases energy levels

Exercise improves both the strength and the efficiency of your cardiovascular system to get the oxygen and nutrients to your muscles. When your cardiovascular system works better everything seems easier and you have more energy for the fun stuff in life.

- Exercise improves muscle strength

Staying active keeps muscles strong and joints, tendons and ligaments flexible, allowing you to move more easily and avoid injury. Strong muscles and ligaments reduce your risk of joint and lower back pain by keeping joints in proper alignment. They also improve coordination and balance.

- Exercise can help you to maintain a healthy weight

The more you exercise, the more calories you burn. In addition, the more muscle you develop, the higher your metabolic rate becomes, so you burn more calories even when you're not exercising. The result? You may lose weight and look better physically which will boost your self-esteem.

- Exercise improves brain function

Exercise increases blood flow and oxygen levels in the brain. It also encourages the release of the brain chemicals (hormones) that are responsible for the production of cells in the hippocampus, the part of the brain that controls memory and learning. This, in turn, boosts concentration levels and cognitive ability, and helps reduce the risk of cognitive degenerative diseases such as Alzheimer's.

- Exercise is good for your heart

Exercise reduces LDL cholesterol (the type that clogs your arteries), increases HDL (the good cholesterol) and reduces blood pressure so it lowers the stress on your heart. Added to this, it also strengthens your heart muscle. Combined with a healthy diet, exercise lowers the risk of developing coronary heart disease.

- Regular exercise lowers your risk of developing type 2 diabetes

Regular exercise helps to control blood glucose levels, which helps to prevent or delay the onset of type 2 diabetes. Additionally exercise helps to prevent obesity, which is a primary factor in the development of type 2 diabetes.

- Exercise enhances your immune system

Exercise improves your body's ability to pump the oxygen and nutrients around your body that are required to fuel the cells that fight bacteria and viruses.

- Staying active reduces the likelihood of developing some degenerative bone diseases

Weight bearing exercise such as running, walking or weight training lowers your risk of both osteoarthritis and osteoporosis – the adage of “use it or lose it” really does apply to bones.

- Exercise may help to reduce the risk of certain cancers

Being fit may mean that the risks of colon cancer, breast cancer and possibly also lung and endometrial cancers are reduced. Studies by the Seattle Cancer Research Centre have suggested that 35% of all cancer deaths are linked to being overweight and sedentary.

- Active people tend to sleep better

Physical activity makes you more tired so you're more ready to sleep. Good quality sleep helps improve overall wellness and can reduce stress.

- Exercise improves your mood and gives you an improved sense of well-being

Physical activity stimulates the release of endorphins which make you feel better and more relaxed. These in turn improve your mood and lower your stress levels.

- Exercise can help prevent and treat mental illnesses like depression

Physical activity can help you meet people, reduce stress levels, cope with frustration, give you a sense of achievement, and provide some important “me time”, all of which help with depression.

- Keeping fit can reduce some of the effects of aging. ⁽²⁾

Also physical exercise is required to diagnose urinary schistosomiasis which is serious parasitic disease affecting large number of population throughout the world.

In early or light-intensity infections (i.e. low worm burden) the schistosome ova are shed intermittently and in low

Amounts. Diagnosis may be enhanced by collecting urine between 10 am and 2 pm, when egg excretion is maximal,

After first sending the patient to run up and down stairs, if possible. ⁽³⁾

Literature review:

No published data about the role of physical exercise in the diagnosis of diseases

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