Cardiopulmonary fitness in response to aerobic training program with Smoking cessation for young men/ Naglaa Fathey Mostafa Ali; Supervisors: Prof. Dr. Nagwa Mohamed Badr, Department of physical therapy for cardiovascular/ Respiratory Disorders and Geriatrics, Faculty of Physical Therapy, Cairo University. Assistant Prof. Dr. Sherif Mohamed Eissa, Department of Physical Therapy for Cardiovascular/ Respiratory Disorder and Geriatrics, Faculty of Physical Therapy, Misr University for Science and Technology; Department of Physical Therapy for Cardiovascular/ Respiratory Disorder and Geriatrics, Faculty of Physical Therapy, Cairo University, Master Degree Thesis, 2010.

ABSTRACT

Background: Chronic smoking was found to affect young male smoker's cardiovascular fitness, impairing the economy and decreasing the capacity of their respiratory and circulatory systems, aided quit attempts through a combination of behavioral counseling and nicotine replacement therapy can improve success rates, but these remain low and more effective interventions are needed. Objectives: To investigate the response of cardiopulmonary fitness to aerobic training with smoking cessation for young men. Methods: The study was done on 90 males aged from 18-24 years selected as light nicotine dependant according to" Fagerström test for nicotine dependency" they were classified according to their choice into 3 groups of equal number (group A) Continue smoking as a control group (Group B) participated in smoking cessation while (group C) participated in smoking cessation and moderate aerobic training program for successive six weeks. Resting heart rate (RHR), resting systolic blood pressure (RSBP), resting diastolic blood pressure (RDBP), pulse pressure (PP), maximum oxygen consumption (VO₂max), oxygen saturation (O₂ sat), and the running distance in 12 minutes (RD_{12}) were measured before and after of application of the selected program. Cardiopulmonary fitness was significantly improved with both group (B) and group (C). The improvement in group (C) was better than group (B).

Key Words: Smoking – Smoking cessation – Cardiopulmonary fitness – 12 min run test – Aerobic training.