ABSTRACT

INFLUENCE HEART HEALTHY GYMNASTICS AGAINST FASTING BLOOD GLUCOSE LEVELS AT ELDERLY IN SOCIAL AND ELDERLY INSTITUTION TRESNA WERDHA' NATAR SOUTH LAMPUNG

By

HANIF FAKHRUDDIN

Diabetes mellitus is a degenerative disease that often affects the elderly. Management of diabetes mellitus aims to maintain blood glucose levels within the normal range, one of them with a physical exercise heart-healthy gymnastics. Gymnastics heart can directly lead to an increase in glucose utilization by the active muscles, and more open capillary nets so that more is available insulin receptors and insulin receptors become more active which will affect the decrease in blood glucose in diabetic patients. The purpose of this study was to determine the effect of heart-healthy gymnastics done regularly on fasting blood glucose levels in the elderly.

This study is a comparative analytical study of numerical pairs with quasi experimental research design in September-October 2012. Respondents consisted of 20 elderly people by doing gymnastics 2 times a week for 2 months. This study compared the mean blood glucose levels before gymnastics on the first day and the mean post-gymnastics in the last meeting.

The results statistical tests t-tests showed that there is a heart healthy gymnastics influence on the decline in fasting blood glucose levels in elderly at Social and Elderly Institution Natar South Lampung (p = 0.0001) with a mean pre-gymnastics 138.70 mg/dl and after 121.85 mg/dl so mean decreased by 16.85 mg/dl or 12.15%. Conclusion, healthy heart gymnastics affect blood glucose levels decreased in the elderly.

Keywords : elderly, fasting blood glucose, heart healthy gymnastics