ABSTRAK

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Program Studi : Kedokteran

Judul Skripsi : Pengaruh Aktivitas Fisik Terhadap Kadar Profil Lipid pada Penderita Diabetes Melitus Tipe 2 di Puskesmas Kecamatan Cempaka Putih dan Tinjauannya Menurut Pandangan Islam

Diabetes melitus tipe 2 merupakan penyakit metabolik kronis yang diakibatkan oleh resistensi insulin dan sering disertai gangguan metabolisme lipid, seperti peningkatan kadar LDL, trigliserida, dan kolesterol total serta penurunan kadar HDL. Aktivitas fisik diketahui berperan penting dalam mengelola kadar profil lipid pada penderita diabetes melitus tipe 2. Penelitian ini bertujuan untuk mengetahui pengaruh aktivitas fisik terhadap profil lipid yang meliputi kadar LDL, HDL, trigliserida, dan kolesterol total penderita diabetes melitus tipe 2 di Puskesmas Kecamatan Cempaka Putih. Penelitian ini menggunakan desain pre-test dan post-test dengan pendekatan kuantitatif eksperimental. Sebanyak 24 responden dipilih berdasarkan kriteria inklusi dan eksklusi menggunakan metode *consecutive sampling.* Responden mengikuti program aktivitas fisik selama 6 bulan dengan intensitas ringan hingga sedang. Data kadar profil lipid didapatkan melalui data rekam medis pemeriksaan laboratorium sebelum dan sesudah intervensi. Data dianalisis menggunakan uji statistik Wilcoxon Signed Ranks Test. Hasil penelitian menunjukkan bahwa terdapat penurunan signifikan kadar LDL ($p = 0,001$) dan kolesterol total ($p = 0,045$) setelah intervensi aktivitas fisik selama 6 bulan. Persentase responden dengan kadar LDL optimal (<100 mg/dL) meningkat dari 16,7% menjadi 45,8%, sedangkan responden dengan kadar kolesterol total dalam kategori diinginkan (<200 mg/dL) meningkat dari 58,3% menjadi 83,3%. Sementara itu, peningkatan kadar HDL ($p = 0,782$) dan penurunan kadar trigliserida ($p = 0,564$) tidak signifikan secara statistik. Aktivitas fisik teratur dapat menjadi pendekatan non-farmakologis yang penting dalam pengelolaan profil lipid penderita diabetes melitus tipe 2.

Kata Kunci : Aktivitas fisik, consecutive sampling, diabetes melitus, profil lipid, wilcoxon signed ranks test

ABSTRACT

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Title : *The Effect of Physical Activity on Lipid Profile Levels in Type 2 Diabetes Mellitus Patients at The Cempaka Putih District Health Center and it's Review from an Islamic Perspective*

Type 2 diabetes mellitus is a chronic metabolic disease caused by insulin resistance and is often accompanied by lipid metabolism disorders, such as increased LDL, triglycerides, and total cholesterol levels, as well as decreased HDL levels. Physical activity is known to play a crucial role in managing lipid profile levels in patients with type 2 diabetes mellitus. This study aimed to determine the effect of physical activity on lipid profile levels, including LDL, HDL, triglycerides, and total cholesterol, in type 2 diabetes mellitus patients at the Cempaka Putih District Health Center. The study employed a pre-test and post-test design with a quantitative experimental approach. A total of 24 respondents were selected based on inclusion and exclusion criteria using the consecutive sampling method. Respondents participated in a physical activity program for six months with light to moderate intensity. Lipid profile levels were measured through laboratory examinations before and after the intervention. Data were analyzed using the Wilcoxon Signed Ranks Test. The results showed a significant reduction in LDL levels ($p = 0.001$) and total cholesterol levels ($p = 0.045$) after six months of physical activity. The percentage of respondents with optimal LDL levels (<100 mg/dL) increased from 16.7% to 45.8%, while those with desirable total cholesterol levels (<200 mg/dL) rose from 58.3% to 83.3%. Meanwhile, the increase in HDL levels ($p = 0.782$) and the decrease in triglycerides ($p = 0.564$) were not statistically significant. Regular physical activity can serve as an important non-pharmacological approach in managing lipid profiles in patients with type 2 diabetes mellitus.

Keywords : *Consecutive sampling, lipid profile, physical activity, type 2 diabetes mellitus, wilcoxon signed ranks test*