

KORELASI AKTIVITAS FISIK DAN KUALITAS TIDUR DENGAN KADAR GLUKOSA DARAH PUASA PADA PASIEN DIABETES MELITUS TIPE 2 DI PUSKESMAS 1 SUMBANG BANYUMAS

ABSTRAK

Latar Belakang: Salah satu indikator dalam empat pilar penatalaksanaan khusus DM tipe 2 adalah aktivitas fisik. Selain itu juga diperlukan kualitas tidur yang optimal sebagai intervensi tambahan dalam memperbaiki kontrol glukosa darah.

Tujuan: Mengetahui korelasi antara aktivitas fisik dan skor kualitas tidur PSQI dengan kadar glukosa darah puasa (GDP) pada pasien diabetes melitus tipe 2 di Puskesmas 1 Sumbang Banyumas.

Metode: Penelitian ini menggunakan design *cross-sectional* dengan sampel penelitian sebanyak 34 pasien prolanis Puskesmas 1 Sumbang Banyumas. Variabel aktivitas fisik dinilai menggunakan kuisisioner *International Physical Activity Quisioner* (IPAQ) dan variabel kualitas tidur menggunakan kuesioner *Pittsburgh Sleep Quality Index* (PSQI). Data penelitian dilakukan analisis menggunakan uji *Spearman*.

Hasil: Hasil analisis bivariat antara aktivitas fisik dengan kadar GDP menunjukkan nilai $p = 0,045$ dan $r = -0,346$. Artinya terdapat korelasi antara aktivitas fisik dengan kadar GDP dengan kekuatan korelasi yang lemah dan arah korelasi negatif, hal tersebut berarti semakin tinggi aktivitas fisik maka semakin rendah kadar GDP. Hasil analisis bivariat antara skor kualitas tidur PSQI dengan kadar GDP menunjukkan nilai $p = 0,000$ dan $r = 0,833$. Artinya terdapat korelasi antara skor kualitas tidur PSQI dengan kadar GDP dengan kekuatan korelasi yang sangat kuat dan arah korelasi positif, hal tersebut berarti semakin tinggi skor kualitas tidur PSQI maka semakin rendah kadar GDP. Sebagai catatan bahwa semakin tinggi skor kualitas tidur PSQI menggambarkan kualitas tidur yang semakin buruk.

Kesimpulan: Terdapat hubungan antara aktivitas fisik dan kualitas tidur dengan kadar glukosa darah puasa pada pasien diabetes mellitus tipe 2 di Puskesmas 1 Sumbang Banyumas.

Kata Kunci : Aktivitas Fisik, Glukosa Darah Puasa, Kualitas Tidur

CORRELATION BETWEEN PHYSICAL ACTIVITY AND SLEEP QUALITY WITH FASTING BLOOD GLUCOSE LEVELS IN PATIENTS WITH TYPE 2 DIABETES MELLITUS AT PUSKESMAS 1 SUMBANG BANYUMAS

ABSTRACT

Background: *One indicator in the four pillars of special management in type 2 diabetes melitus is physical activity. Beside of physical activity, it is also require an optimal sleep quality as an additional intervention to improving blood glucose control.*

Objective: *To determine whether there was a correlation between physical activity and sleep quality with fasting blood glucose levels in patients with type 2 diabetes mellitus at Puskesmas 1 Sumbang Banyumas.*

Methods: *This research used a cross sectional design with the sample of this study was 34 prolans's patients at Puskesmas 1 Sumbang Banyumas. Physical activity variables were assessed using the International Physical Activity Quistionnaire (IPAQ) quistionnaire and sleep quality variables using the Pittsburgh Sleep Quality Index (PSQI) quistionnaire. The research data were analyzed using Spearman test.*

Result: *The results of the bivariate analysis between physical activity and fasting blood glucose levels showed that p value = 0,045 and $r = -0,346$. This shows that there is a correlation between physical activity with fasting blood glucose levels with weak correlation and negative correlation direction, this means that the higher the physical activity the lower the fasting blood glucose levels. The results of the bivariate analysis between PSQI sleep quality score and fasting blood glucose levels showed that p value = 0.000 and $r = 0,833$. This shows that there is a correlation between PSQI sleep quality score and fasting blood glucose levels with very strenght correlation and possitive correlation direction, this means that the higher the PSQI sleep quality score the higher the fasting blood glucose levels. As an information, thet the higher the PSQI sleep quality score the worse the sleep quality.*

Conclusion: *There is relationship between pysical activity and sleep quality with fasting blood glucose levels in patients with type 2 diabetes mellitus at Puskesmas 1 Sumbang Banyumas.*

Keywords : *Physical activity, fasting blood glucose levels, sleep quality*