Kadar HbA1c pada Lansia Obesitas Abdominal

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ABSTRAK

Latar Belakang: Kondisi obesitas abdominal merupakan salah satu faktor risiko dari sindrom metabolik termasuk diabetes mellitus. HbA1c merupakan kriteria diagnostik untuk mendeteksi lebih banyak kasus diabetes dan pradiabetes.

Tujuan: Mengetahui kadar HbA1c pada lansia dengan obesitas abdominal dan menganalisis hubungan HbA1c dengan lingkar pinggang, usia, jenis kelamin, dan aktivitas fisik.

Metode: Penelitian ini merupakan penelitian observasional dengan rancangan *cross sectional*. Subjek diambil dengan metode *multistage sampling* yaitu *cluster sampling* dan *random sampling*. Pengukuran lingkar pinggang dilakukan menggunakan pita statis dan pengujian HbA1c dilakukan dengan metode *immunofluorenscence*. Uji univariat dan bivariat dilakukan dengan menggunakan uji *Spearman* dan *Mann-Whitney*.

Hasil: Rerata lingkar pinggang lansia adalah $91,76 \pm 7,38$ cm dan rerata HbA1c lansia adalah $6,12 \pm 1,09\%$. Sebesar 30% subjek tergolong prediabetes dan 25% subjek sebagai diabetes. Hasil analisa menyatakan bahwa terdapat hubungan positif yang tidak signifikan antara lingkar pinggang dengan kadar HbA1c ($p=0,940$). Uji korelasi usia, aktivitas fisik, dan jenis kelamin dengan kadar HbA1c menunjukkan hasil yang tidak signifikan.

Simpulan: Sebesar 30% subjek tergolong prediabetes dan 25% subjek sebagai diabetes. Kadar HbA1c berhubungan positif tidak signifikan dengan lingkar pinggang dan usia, berhubungan negatif tidak signifikan dengan aktivitas fisik, serta tidak ada perbedaan yang signifikan antara kedua jenis kelamin.

Kata Kunci: obesitas abdominal, HbA1c, lingkar pinggang, diabetes mellitus

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HbA1c Levels in Elderly with Abdominal Obesity

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ABSTRACT

Background: Abdominal obesity is a risk factor for metabolic syndrome, including diabetes mellitus. HbA1c can be suggested as a diagnostic criterion to detect more cases of diabetes and prediabetes.

Objective: To determine HbA1c levels in elderly with abdominal obesity and analyze the relationship between HbA1c and waist circumference, age, gender, and physical activity.

Methods: This research was an observational study with a cross sectional design. Subjects were taken by multistage sampling method, namely cluster sampling and random sampling. Waist circumference was measured using a static tape and HbA1c was tested using the immunofluorescence method. Univariate and bivariate tests were carried out using the Spearman and Mann-Whitney tests.

Results: The average waist circumference in the elderly was 91.76 ± 7.38 cm and the average HbA1c in the elderly was $6.12 \pm 1.09\%$. 30% of the subjects were classified as prediabetic and 25% of the subjects were diabetic. The results of the analysis stated that there was a positive but not significant relationship between waist circumference and HbA1c levels ($p=0.940$). The correlation test of age, physical activity, and gender with HbA1c levels showed insignificant results..

Conclusion: As much as 30% of the subjects were classified as prediabetic and 25% of the subjects were diabetic. HbA1c levels were positively related to waist circumference and age but not significant, negatively related to physical activity but also not significant, and there was no significant difference between the two sexes.

Keyword: abdominal obesity, HbA1c, waist circumference, diabetes mellitus

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