

## ABSTRAK

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### PENGARUH PENGENDALIAN KADAR GULA DARAH PASIEN DIABETES MELITUS TIPE 2 TERHADAP FUNGSI KOGNITIF PADA LANSIA DI PANTI WREDA PERIODE MARET-MEI 2024

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**Latar Belakang:** Diabetes Melitus Tipe 2 (T2DM) umumnya terjadi pada lansia dan dapat mempengaruhi fungsi kognitif. Risiko gangguan fungsi kognitif dapat diturunkan dengan mengendalikan kadar gula darah. Oleh karena itu, pengendalian kadar gula darah berperan penting dalam mengontrol fungsi kognitif pada lansia.

**Tujuan Penelitian:** Mengetahui pengaruh pengendalian kadar gula darah pasien T2DM terhadap fungsi kognitif pada lansia di Panti Wreda.

**Metode Penelitian:** Penelitian ini menggunakan desain studi potong-lintang terhadap 59 sampel lansia T2DM di Panti Wreda dengan teknik *non-randomized purposive sampling* dan kuesioner *Montreal Cognitive Assessment-INA* (MOCA-INA).

**Hasil:** Pada lansia dengan gula darah tidak terkontrol, yang memiliki nilai fungsi kognitif normal sebanyak 6 dan 25 mengalami gangguan fungsi kognitif. Sedangkan yang gula darah terkontrol, 17 memiliki fungsi kognitif normal dan 11 mengalami gangguan fungsi kognitif. Terdapat perbedaan fungsi yang signifikan, dimana lansia gula darah tidak terkontrol mengalami gangguan fungsi kognitif lebih tinggi (*P-value* 0.001).

**Kesimpulan:** Terdapat pengaruh signifikan antara pengaruh pengendalian kadar gula darah pasien diabetes melitus tipe 2 terhadap fungsi kognitif pada lansia di Panti Wreda.

**Referensi:** 48

**Kata kunci:** kadar gula darah, diabetes melitus tipe 2, fungsi kognitif, *Montreal Cognitive Assessment*, lansia.

## ***ABSTRACT***

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### ***THE INFLUENCE OF CONTROLLING BLOOD SUGAR LEVELS IN TYPE 2 DIABETES MELLITUS PATIENTS TO COGNITIVE FUNCTION OF ELDERLY IN NURSING HOMES PERIOD MARCH-MAY 2024***

xiv + 58 Pages + 2 Figures + 3 Charts + 7 Tables + 6 Attachments

**Background:** Type 2 Diabetes Mellitus (T2DM), typically affecting the elderly, can lead to cognitive decline. However, managing blood sugar levels can mitigate this risk. Consequently, maintaining proper blood sugar control is crucial for preserving cognitive function in older adults.

**Objective:** To determine the influence between controlling blood sugar levels in T2DM patients and cognitive function in elderly people in nursing homes.

**Method:** This research employed a cross-sectional study design, involving 59 elderly T2DM patients in nursing homes. Non-randomized purposive sampling techniques were used, and cognitive function was assessed using the Montreal Cognitive Assessment-INA (MoCA-INA) questionnaire.

**Results:** Among elderly individuals with uncontrolled blood sugar, 6 had normal cognitive function, while 25 had impaired cognitive function. In contrast, among those with controlled blood sugar, 17 had normal cognitive function, and 11 had impaired cognitive function. The difference in cognitive function between these groups is significant, with a higher incidence of cognitive impairment observed in those with uncontrolled blood sugar ( $P$ -value 0.001).

**Conclusion:** There is a significant influence between the effect of controlling blood sugar levels in type 2 diabetes mellitus patients on cognitive function in elderly people in nursing homes.

**References:** 48

**Keywords:** blood sugar level, diabetes mellitus type 2, cognitive function, Montreal Cognitive Assessment, elderly.