

## Abstrak

Setiawan, Dion. 2013. **Hubungan Antara Sindroma Metabolik Dengan Penurunan Status Kognitif Lansia.** Tugas Akhir, Program Studi Pendidikan Dokter Fakultas Kedokteran Universitas Brawijaya. Pembimbing : (1) dr. Sri Soenarti, Sp.PD. (2) dr. Frilya Rachma Putri Sp.KJ

**Latar belakang:** Sindroma metabolik merupakan masalah kesehatan masyarakat dengan morbiditas dan mortalitas yang bermakna dengan resiko penyakit kardiovaskuler, cerebrovaskuler dan diabetes mellitus yang cukup tinggi. Sindroma metabolik berkontribusi terhadap respon inflamasi dengan mekanisme atherosklerosis atau inflamasi dimana keduanya menyebabkan kontribusi terhadap penurunan fungsi kognitif.

**Tujuan:** Menganalisa hubungan antara adanya sindroma metabolik dengan penurunan status kognitif pada lansia

**Metode:** Dilakukan studi case control terhadap 131 lansia terbagi menjadi 50 penderita sindroma metabolik dan 63 kontrol untuk kemudian dilakukan pemeriksaan MMSE guna mengetahui status kognitif subyek. Uji korelasi spearman digunakan untuk menganalisa hubungan dan uji regresi logistik untuk melihat OR besarnya resiko sindroma metabolik dalam menurunkan status kognitif.

**Hasil:** terdapat hubungan yang bermakna antara sindroma metabolik dan status kognitif lansia, sindroma metabolik akan membuat lansia beresiko menderita penurunan kognitif ( $p=0,000$ ;  $r=0,413$ ). Adanya sindroma metabolik akan beresiko terjadinya penurunan kognitif ringan sebesar 7,714 kali lipat lebih besar (OR 7,714, 95%CI=2,906-20,487), dan beresiko terjadinya penurunan kognitif berat sebesar 4,696 kali lipat (OR 4,696, 95%CI=0,803-27,461).

**Kesimpulan:** sindroma metabolik merupakan faktor resiko terjadinya penurunan kognitif pada lansia

**Kata kunci:** Sindroma metabolik, MMSE, Penurunan kognitif



## Abstract

Setiawan, Dion. 2013. **Relationship Between Metabolic Syndrome and Elderly Cognitive Impairment Status.** Final Assignment, Medical Program, Faculty of Medicine, Brawijaya University. Supervisors: (1) dr. Sri Soenarti, Sp.PD. (2) dr. Frilya Rachma Putri Sp.KJ

**Background:** Metabolic syndrome (Mets) is a public health problem with significant morbidity and mortality with the risk of cardiovascular diseases, cerebrovascular diseases, and diabetes mellitus were quite high. Mets contribute to the inflammatory response and atherosclerosis mechanism in which both contributed to the decline in cognitive function .

**Objective:** to investigate the correlation between the presence of the metabolic syndrome with decreased cognitive status in elderly

**Methods:** A case control study on 131 elderly divided into 50 patients with Mets and 63 controls were performed MMSE examination to determine the cognitive status of the subject. Spearman correlation test was used to analyze the correlation between Mets and cognitive function and logistic regression performed to see OR, the risk of Mets in reducing cognitive status .

**Result:** There was a significant correlation between metabolic syndrome and cognitive status of the elderly, Mets would make the elderly at risk of suffering from cognitive decline ( $p = 0.000$  ;  $r = 0.413$ ). The presence of metabolic syndrome would cause 7.714 times greater risk suffer from mild cognitive impairment (OR 7.714, 95 %CI=2.906 to 20.487), 4.696 times greater risk suffer from severe cognitive impairment (OR 4.696, 95%CI=0.803 to 27.461).

**Conclusion:** Metabolic syndrome is a risk factor for cognitive decline in elderly

**Keywords:** Metabolic Syndrome, MMSE, Cognitive decline

