



INTISARI

Latar Belakang

Sindrom metabolik telah menjadi penanda klinis untuk deteksi dini penyakit kardiovaskular dan diabetes tipe 2. Sebagian besar individu dengan sindrom metabolik tidak memiliki tanda atau gejala. Studi di Taiwan menyebutkan bahwa dokter dan anggota staf administrasi memiliki prevalensi sindrom metabolik yang lebih tinggi. Studi terbaru menyebutkan bahwa inflamasi, terutama inflamasi kronis yang *low-grade*, memainkan peran yang lebih besar pada patogenesis sindrom metabolik. Studi sebelumnya menyebutkan bahwa peningkatan *C-Reactive Protein* (CRP) dikaitkan dengan peningkatan risiko dislipidemia, diabetes dan sindrom metabolik pada populasi umum. Belum didapatkan penelitian yang menentukan *cut-off* kadar CRP terhadap sindrom metabolik dan penelitian tentang hubungan CRP dengan sindrom metabolik pada populasi dokter di Indonesia.

Tujuan

Penelitian ini bertujuan untuk mengetahui hubungan kadar *C-Reactive Protein* dengan sindrom metabolik pada populasi dokter.

Metode

Penelitian yang dilakukan adalah penelitian potong lintang dengan mengevaluasi hubungan CRP dengan sindrom metabolik berdasarkan kriteria Harmonized. Subjek penelitian yaitu dokter yang menjalani pemeriksaan kesehatan di Laboratorium FK-KMK UGM pada bulan Mei 2023. Sampel diambil dengan cara konsekutif dengan memasukkan semua subjek yang memenuhi kriteria inklusi dan eksklusi sampai jumlah sampel terpenuhi berdasarkan perhitungan. Penilaian hubungan ditentukan dengan nilai RP (Rasio Prevalensi) dengan nilai $p < 0,05$ dianggap bermakna secara statistik.

Hasil

Dari 173 subjek penelitian 46(27%) subjek mengalami sindrom metabolik dan 127 (73%) bukan sindrom metabolik. Uji beda antar populasi ditemukan parameter CRP berbeda bermakna antara populasi sindrom metabolik dan bukan sindrom metabolik. Analisis regresi menunjukkan kadar CRP $\geq 4,75$ mg/L memiliki peluang untuk sindrom metabolik dengan nilai RP 2,08 (IK 95% 1,18-3,68).

Simpulan

Kadar CRP $\geq 4,75$ mg/L memiliki risiko terjadinya sindrom metabolik 2,08 kali lebih besar dibandingkan dengan kadar CRP $< 4,75$ mg/L pada populasi dokter.

Kata Kunci: Populasi dokter, Sindrom metabolik, CRP



ABSTRACT

Background

Metabolic syndrome has become a clinical marker for early detection of cardiovascular disease and type 2 diabetes. Most people with metabolic syndrome have no signs or symptoms. Studies in Taiwan suggest that doctors and administrative staff members have a higher prevalence of metabolic syndrome. Recent studies suggest that inflammation, especially chronic low-grade inflammation, has a more significant role in the pathogenesis of metabolic syndrome. Previous studies have indicated that increased C-reactive protein (CRP) is associated with an increased risk of dyslipidemia, diabetes, and metabolic syndrome in the general population. There have been no studies that determine the cut-off of CRP levels for metabolic syndrome and no research on the relationship between CRP and metabolic syndrome in physicians in Indonesia.

Purpose

This study aimed to determine the relationship of C-reactive protein with metabolic syndrome in physicians.

Method

The study was a cross-sectional study evaluating the relationship of CRP with metabolic syndrome based on Harmonized criteria. The research subjects were physicians medically examined at the UGM Laboratory in May 2023. Samples are taken consecutively by including all issues that meet the inclusion and exclusion criteria until the number of subjects is completed based on calculations. Opportunity assessment is determined by the PR (Prevalence Ratio) value. A value of $p < 0.05$ is considered statistically significant.

Result

Of the 173 study subjects, 46 (27%) had metabolic syndrome, and 127 (73%) had non-metabolic syndrome. Tests of differences between populations found that CRP parameters differed significantly between metabolic and non-metabolic syndrome populations. Regression analysis showed CRP levels ≥ 4.75 mg / L had a chance for metabolic syndrome with a PR number of 2.08 (95% CI 1.18-3.68).

Conclusion

C-reactive protein levels ≥ 4.75 mg/L have a two times greater chance of metabolic syndrome than CRP levels < 4.75 mg/L in the physician population.

Keywords: Physicians, Metabolic syndrome, CRP