

## Body mass index, total cholesterol, and ratio total to HDL cholesterol were determinants of metabolic syndrome in the Indonesian elderly

Sudijanto Kamsu, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=112716&lokasi=lokal>

---

### Abstrak

Ketersediaan data tentang faktor-faktor yang berhubungan dengan metabolik sindrom pada kelompok lanjut usia di Indonesia sangat terbatas. Data tersebut sangat diperlukan dalam upaya pencegahan penyakit kardiovaskular. Tujuan penelitian ini untuk mengetahui prevalensi metabolik sindrom dan hubungan pengukuran antropometrik, profil lipid, tekanan darah, asupan makanan dan aktifitas fisik dengan metabolik sindrom pada kelompok lanjut usia. Suatu studi dengan rancangan ?cross sectional? dilakukan di Jakarta dengan menggunakan metoda ?multistage random sampling?. Jumlah responden 352 orang lanjut usia wanita dan 137 orang lanjut usia pria. Pengumpulan data dilakukan dengan pengukuran antropometri, analisa biokimia darah, analisa asupan makanan dan pengukuran indeks aktivitas. Prevalensi metabolik adalah 18.2% pada lanjut usia wanita dan 6.6% pada lanjut usia pria. Studi ini menunjukkan bahwa pada lanjut usia yang mempunyai berat badan berlebih, risiko untuk mempunyai metabolik sindrom hampir empat kali lebih tinggi dibanding lanjut usia dengan indeks masa tubuh normal (rasio odds suaian = 3.98; 95% confidence interval 2.23 - 7.10). Lanjut usia dengan plasma total kolesterol &#8805; 240 mg/dl, risiko untuk mendapatkan metabolik sindrom 2.7 kali lebih tinggi dibandingkan yang mempunyai plasma total kolesterol < 240 mg/dl. Sementara lanjut usia yang mempunyai rasio total kolesterol terhadap HDL kolesterol &#8805; 5, risiko untuk menderita metabolik sindrom dua kali lebih tinggi dibandingkan yang rasionya < 5. Studi ini menunjukkan bahwa pemeriksaan profil lipid, pengukuran tekanan darah dan pengukuran antropometrik sederhana yang teratur pada kelompok lanjut usia penting dilakukan untuk mendeteksi risiko terjadinya sindroma metabolik. (Med J Indones 2007; 16:195-200)

<hr>

Available data on metabolic syndrome amongst the aged Indonesian population are limited, despite the importance of these data for cardio vascular disease (CVD) preventive measures. The objective of this study was to assess prevalence of metabolic syndrome and the associations between anthropometric measurements, lipid profiles, blood pressure, nutrient intakes and physical activity and metabolic syndrome in the elderly. A cross-sectional study was undertaken from January to April 2000 at selected Public Health Centers in Jakarta using multistage random sampling. Data were collected through anthropometric measurements, biochemical blood analysis, nutrient intake assessment and activity index. The subjects consisted of 352 females and 137 males. Prevalence of metabolic syndrome among females was 18.2% and 6.6% in males. This study shows metabolic syndrome was associated with gender, body mass index, total cholesterol and the ratio of total to HDL-cholesterol. Elderly who were overweight based on body mass index (BMI) had almost a four-fold increased risk for metabolic syndrome (adjusted odds ratio = 3.98; 95% confidence interval 2.23 - 7.10). Those who had plasma total cholesterol &#8805; 240 mg/dl had a 2.7 times greater risk of having metabolic syndrome than those with plasma total cholesterol < 240 mg/dl. Furthermore, in terms of the ratio of total to HDL cholesterol, those who had a ratio &#8805; 5 compared to a ratio < 5 had two-fold increased risk for metabolic syndrome. In conclusion, this study shows the

importance of routine checks of lipid profile, blood pressure and simple anthropometric assessment to detect the risk of metabolic syndrome in the elderly. (Med J Indones 2007; 16:195-200)