

Prevalence of Metabolic Syndrome and its Components based on International Diabetes Federation (IDF) Definition in North Sumatra, Indonesia

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ABSTRACT

Background: Metabolic Syndrome (MetS) is a group of risk factors including hypertension, dyslipidemia, insulin resistance, and obesity that closely related with cardiovascular disease (CVD) and type 2 diabetes mellitus. Hence, a research is needed to determine the prevalence of MetS and its components in North Sumatra, Indonesia.

Aim: This research is aimed to determine the prevalence of MetS and its components in North Sumatra, Indonesia.

Method: This is a retrospective study using the data from Fourth wave of the Indonesian Family Life Survey (IFLS4). The survey was conducted by RAND, the center for Population and Policy Studies (CPPS) of the Universitas Gadjah Mada and Survey METER in the years of 2007/2008. The data was analyzed using Stata version 12.0.

Result: The prevalence of MetS in North Sumatra is 19.94%. The prevalence of dyslipidemia, hypertension, central obesity, pro-inflammatory state and insulin resistance are 73.37%, 57.74%, 39.87%, 24.24% and 0.80% respectively.

Conclusion: The prevalence of MetS in North Sumatra is 19.94% based on IDF definition. The most common component found is dyslipidemia.

Keywords: Metabolic syndrome (MetS), International Diabetes Federation (IDF), prevalence, Indonesia, central obesity, dyslipidemia, hypertension, insulin resistance, hsCRP, age, sex, ethnicity, geographic factor.

Prevalensi Sindrom Metabolik dan Komponen berdasarkan Definisi International Diabetes Federation (IDF) di Sumatera Utara, Indonesia

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ABSTRAK

Pendahuluan: Sindrom metabolik (MetS) adalah kumpulan kelainan yang terdiri atas hipertensi, dislipidemia, resistensi insulin, dan obesitas yang dapat menyebabkan penyakit kardiovaskular (CVD) serta diabetes mellitus tipe 2. Oleh karena itu, penelitian ini penting untuk mengetahui bahwa prevalensi MetS dan komponennya di Sumatera Utara, Indonesia.

Tujuan: Penelitian ini bertujuan untuk mengetahui prevalensi sindrom metabolik dan komponennya di Sumatera Utara, Indonesia.

Metode: Cara retrospektif digunakan untuk menjalankan penelitian ini. Sumber data didapatkan dari Survei Aspek Kehidupan Rumah Tangga Indonesia ke-4 (IFLS4), dikumpul oleh RAND, center for Population and Policy Studies (CPPS) Universitas Gadjah Mada dan Survey METER pada tahun 2007/2008. Data penelitian dianalisa dengan Stata versi 12.0.

Hasil: Prevalensi MetS di Sumatera Utara adalah 19.94%. Ditemukan bahwa komponen sindrom metabolik yaitu dislipidemia, hipertensi, obesitas sentral, status pro-inflammasi dan resistensi insulin masing-masing 73.37%, 57.74%, 39.87%, 24.24% dan 0.80%.

Simpulan: Prevalensi MetS di Sumatera Utara berdasarkan kriteria IDF adalah sebesar 19.94%. Secara keseluruhan komponen sindrom metabolik yang paling sering terjadi adalah dislipidemia.

Kata Kunci: sindrom metabolik (MetS), International Diabetes Federation (IDF), prevalensi, Indonesia, obesitas sentra, dislipidemia, hipertensi, resistensi insulin, hsCRP, umur, jenis kelamin, kesukuan, faktor geografik.