Validitas ukuran lingkar pinggang, rasio lingkar pinggang-pinggul, dan rasio lingkar pinggang-tinggi badan dalam memprediksi di Area Pelabuhan Tanjung Priok Tahun 2016

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Abstrak

Akhir-akhir ini, berbagai studi berfokus pada indeks antropometri untuk obesitasseperti lingkar pinggang (LP), rasio lingkar pinggang-lingkar pinggul (RLPP), danrasio lingkar pinggang-tinggi badan (LP-TB) sebagai faktor prediksi sindrommetabolik. Penelitian ini bertujuan mengidentifikasi cut-off points dengan sensitivitasdan spesifistas optimal dari indeks antropometri untuk obesitas dalam mendefinisikansindrom metabolik menurut kriteria NCEP-ATP III pada pegawai di area TanjungPriok di Jakarta. Desain penelitian adalah cross sectional. Analisis data menggunakankurva Receiver Operating Characteristic (ROC) untuk mengindentifikasi cut-offpoints optimal dari LP, RLPP, dan LP-TB dalam memprediksi sindrom metabolik.Total sampel diperoleh sebanyak 256 responden (174 pria dan 82 wanita) berusia 20-58 tahun, yang bekerja di instansi pemerintah di area pelabuhan Tanjung Priok.Berdasarkan area under curve (AUC), didapatkan indeks antropomteri dengan angkaterbesar hingga terkcecil secara berurutan yaitu LP-TB, LP, dan RLPP. Didapati cut-off point LP ≥88 cm pada pria dan ≥85 cm pada wanita. Cut-off points RLPP padapria ≥0,9 dengan sensitifitas 63% dan spesifisitas 60%, sedangkan RLPP pada wanita≥0,83 dengan sensitifitas 73% dan spesifitas 62%. Didapatkan LP-TB dengan cut-offpoints 0,5, dengan sensitivitas 66% (pria) dan 67% (wanita) serta spesifisitas 65%(pria) dan 62% (wanita). Sebagai faktor prediksi sindrom metabolik, indeksantropometri dapat dipilih dengan pertimbangan kemudahan pengukuran. LP dinilailebih mudah dipraktikkan karena pengukuran tidak berbentuk rasio dan hanyamelibatkan satu pengukuran antropometri saja, sehingga bias pengukuran dapatdiminimalisir. Dibutuhkan studi longitudinal untuk memperkuat hasil penelitian ini.Kata kunci:Lingkar pinggang, rasio lingkar pinggang-lingkar pinggul, rasio lingkar pinggang-tinggi badan, receiver operating characterisitic, sindrom metabolik <hr /> Recently, many studies have focused on anthropometric indices for abdominal obesityas waist circumference (WC), waist to hip ratio (WHR), and waist to height ratio(WHtR) to define metabolic syndrome (MetS). This study aimed to compare WC,WHR, and WHtR and define an optimal cut-off values, which is most closelypredictive of the components of the NCEP-ATP III MetS definition among employeesin Port of Tanjung Priok, Jakarta. This study was cross-sectional study. ReceiverOperating Characteristic (ROC) analysis was used to examine discrimination andfind optimal cut-off values of WC, WHR, and WHtR to predict components of MetS. Itincluded 256 subjects (174 men and 82 women) aged 20-58 years, who worked inPort of Tanjung Priok. According to area under curve, we found WHtR with thehighest score, followed by WC, and followed by WHR with the lowest score. WC cut-off points were ≥88 cm in men dan ≥85 cm in women. WHR cut-off points were ≥0,9in men (sensitivity 63%; specificity 60%), ≥0,83 in women (sensitivity 73%;specificity 62%). WHtR cut-off points was 0,5, in men and women (sensitivity 66%and specificity 65% in men; sensitivity 67% and specificity 62% in women).Anthropometric indices for metabolic syndrome prediction could be determined byconsidering measurement complexity. WC was considered as an easy measurementbecause it`s not in ratio and involved one measurement. Bias of measurement couldbe

minimized. Longitudinal studies is needed to evaluate the consistency of thefindings.Keywords:Waist circumference waist to hip ratio, waist to height ratio, receiver operatingcharacteristic, metabolic syndrome