

# Hubungan antara hasil pemeriksaan kapasitas difusi paru terhadap karbonmonoksida (DLCO) metode napas tunggal dengan derajat pasien PPOK di RSUP Persahabatan Jakarta = The correlations between measurement of lung diffusing capacity with single breath methods (DLCO-SB) with the group of COPD patients in Persahabatan Hospital Jakarta

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## Abstrak

**ABSTRAK**  
Latar belakang : Penelitian ini merupakan studi awal untuk mengukur kapasitas difusi paru DLCO-SB ipada pasien PPOK di RSUP Persahabatan Jakarta untuk mengetahui prevalens penurunan nilai DLCO pada pasien PPOK.

Metode : Penelitian ini menggunakan desain studi potong lintang (cross sectional study) pada pasien PPOK yang berkunjung di Poliklinik Asma-PPOK RSUP Persahabatan Jakarta. Dilakukan uji spirometri dan DLCO pada pasien PPOK yang diambil secara konsekutif antara bulan Mei-Juli 2015. Komorbiditas juga dicatat.

Hasil : Uji Spirometri and DLCO dilakukan pada 65 subjek didapatkan 7 subjek (10,8%) termasuk kedalam PPOK Grup A, 19 subjek (29,2%) PPOK Grup B, 21 subjek (32,3%) PPOK grup C dan 18 subjek (27,7%) PPOK grup D. rerata usia 64,15 (45-89) tahun;rerata VEP

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% 46,05%, rerata nilai DLCO 19,42 ml/menit/mmHg dan rerata DLCO % adalah 72.00%. prevalens penurunan DLCO pasien PPOK adalah 56,92% (37/65 subjek) sedangkan 28 subjek dengan nilai DLCO normal. Ditemukan 15 subjek (23,07%) dengan penurunan ringan, 18 subjek (27.69%) penurunan sedang dan 4 subjek (6,15%) dengan penurunan berat. Ditemukan 47 subjek (72,3%) memiliki komorbid. Terdapat hubungan bermakna antara grup PPOK, derajat spirometri, VEP

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, IMT dan komorbiditas dengan nilai hasil uji DLCO. Tidak terdapat hubungan bermakna antara nilai DLCO dengan jenis kelamin, umur, riwayat merokok, Indeks Brinkmann, obstruksi-restriksi dan lama terdiagnosis PPOK.

Kesimpulan : Proporsi penurunan nilai DLCO pada pasien PPOK adalah 56,92%. Terdapat hubungan bermakna antara grup PPOK, derajat spirometri, VEP

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PPOK.

**ABSTRACT**

Background and the aim of study : This is a preliminary study to measure DLCO-SB in COPD patients in Persahabatan Hospital. The aim of the study is to know the magnitude of disturbance in diffusing capacity of the lung in COPD patients.

Methods : This was a cross sectional study in which COPD patients attending COPD-Asthma clinic in Persahabatan Hospital Jakarta were performed spirometry and DLCO-SB consecutively between May 2015-July 2015. Comorbidities conditions were also recorded.

Results : Spirometry and DLCO-SB measurement were conducted on 65 COPD subjects of which 7 subjects (10.8%) were COPD Group A, 19 subjects (29.2%) were Group B, 21 subjects (32.3%) were COPD group C and 18 subjects (27.7%) were COPD group D. The mean age was 64.15 (45-89); mean FEV

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% was 46.05%, mean DLCO measured was 19.42 ml/min/mmHg and the mean DLCO% was 72.00%. The prevalence of decreasing in diffusing capacity of the lung in COPD patients was 56.92% (37 subjects) While 28 subjects were normal. There were 15 subjects (23.07%) with mild decrease in DLCO, 18 subjects (27.69%) were moderate decrease and 4 subjects (6.15%) with severe decrease. 47 subjects (72.3%) had comorbid conditions. There was significant correlation between grup COPD, GOLD COPD grade, VEP

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, BMI and comorbidities with magnitude of decreasing DLCO value. There was no correlation between DLCO value with sex, smoking history, Brinkmann index, age, obstruction-mix criteria, length of COPD period.

Conclusion : The proportion of decreasing in DLCO in COPD patients are 56.92%. There is significant correlation among the group of COPD, GOLD COPD grade, VEP

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