

INTISARI

Latar Belakang: Jenis pekerjaan berdasarkan lingkungannya dibagi menjadi dua yaitu *indoor* dan *outdoor*. Setiap pekerjaan memiliki resiko terhadap penyakit yang disebut penyakit akibat kerja dan sebanyak 10-30%-nya adalah penyakit paru, sehingga diperlukan tes fungsi paru untuk mengetahui perbedaan kapasitas paru pada pekerja *indoor* dan pekerja *outdoor* di Universitas Muhammadiyah Yogyakarta.

Tujuan: Penelitian ini bertujuan untuk mengetahui perbedaan kapasitas paru pada pekerja *indoor* dan pekerja *outdoor* di Universitas Muhammadiyah Yogyakarta.

Metode: Penelitian ini bersifat kausal komparatif dengan desain penelitian *cross-sectional*. Populasi yang digunakan adalah karyawan Universitas Muhammadiyah Yogyakarta yang dibagi menjadi dua kelompok yaitu pekerja *indoor* dan pekerja *outdoor*. Sampel yang diambil berjumlah 60 orang dengan teknik *convenience sampling*.

Hasil: Penelitian telah dilaksanakan pada 60 responden yang terdiri dari 30 pekerja *indoor* dan 30 pekerja *outdoor* dengan hasil perbedaan volume tidal $p=0,150$ ($p>0,05$), perbedaan volume cadangan inspirasi $p=0,112$ ($p>0,05$), perbedaan volume cadangan ekspirasi $p=0,934$ ($p>0,05$), perbedaan kapasitas vital $p=0,105$ ($p>0,05$), perbedaan kapasitas inspirasi $p=0,126$ ($p>0,05$), perbedaan volume ekspirasi paksa dalam 1 detik $p=0,159$ ($p>0,05$) dan perbedaan kapasitas vital paksa $p=0,013$ ($p<0,05$).

Kesimpulan: Terdapat perbedaan kapasitas vital paksa pekerja *indoor* dan pekerja *outdoor* di Universitas Muhammadiyah Yogyakarta. Tidak terdapat perbedaan volume tidal, volume cadangan inspirasi, volume cadangan ekspirasi, volume ekspirasi paksa dalam 1 detik, kapasitas vital dan kapasitas inspirasi pada pekerja *indoor* dan pekerja *outdoor* di Universitas Muhammadiyah Yogyakarta.

Kata kunci: kapasitas paru, pekerja *indoor*, pekerja *outdoor*

ABSTRACT

Study Background: Type of work based on environment is divided into two types, indoor and outdoor. Each job has a risk of disease called occupational diseases and 10-30% of it is a lung disease, so that it is necessary to do lung function test to determine the differences of lung capacity between indoor workers and outdoor workers.

Purpose: The aim of this study is to compare lung capacity of indoor workers and outdoor workers in Muhammadiyah University of Yogyakarta.

Method: This study was a causal comparative study with cross sectional approach. The population in this study are employees of Muhammadiyah University of Yogyakarta that divided into two groups, indoor workers and outdoor workers. The sample size taken was 60 and sample technique is done by convenience sampling.

Result: Research has been conducted on 60 respondents consisting of 30 indoor workers and 30 outdoor workers with the results of tidal volume difference $p=0.150$ ($p>0.05$), difference of backup inspiration volume $p=0.112$ ($p>0.05$), difference of backup expiration volume $p=0.934$ ($p>0.05$), difference of vital capacity $p=0.105$ ($p>0.05$), difference in the capacity of inspiration $p=0.126$ ($p>0.05$), difference in forced expiratory volume in 1 second $p=0.159$ ($p>0.05$) and difference of forced vital capacity $p=0.013$ ($p<0.05$).

Conclusion: There is difference of forced vital capacity between indoor workers and outdoor workers in Muhammadiyah University of Yogyakarta. There are no differences in tidal volume, backup inspiration volume, backup expiration volume, vital capacity, inspiration capacity, and forced expiratory volume in 1 second between indoor workers and outdoors workers in Muhammadiyah University of Yogyakarta.

Keywords: lung capacity, indoor workers, outdoor workers.