

**PENGARUH TINGKAT AKTIVITAS FISIK HARIAN TERHADAP TEKANAN DARAH  
PADA KARYAWATI CLEANING SERVICE DI UNIVERSITAS YARSI DAN  
TINJAUANNYA MENURUT PANDANGAN ISLAM**

**Amalia Maulida<sup>1</sup> Diniwati Mukhtar<sup>2</sup> Amir Mahmud<sup>3</sup> Qomariyah RS<sup>4</sup>**

<sup>1</sup> Mahasiswa Fakultas Kedokteran Universitas YARSI

<sup>2</sup> Staff Pengajar Bagian Ilmu Fisiologi Fakultas Kedokteran Universitas YARSI

<sup>3</sup> Staff Pengajar Bagian Ilmu Agama Fakultas Kedokteran Universitas YARSI

<sup>4</sup> Staff Pengajar Bagian Ilmu Fisiologi Fakultas Kedokteran Universitas YARSI

**ABSTRAK**

**Latar belakang:** Penyakit kardiovaskular yang merupakan *Non communicable disease* adalah adalah gangguan kesehatan yang hingga kini masih menjadi masalah di berbagai belahan dunia. Aktivitas fisik harian yang tinggi akan menyebabkan penurunan resistensi perifer dan relaksasi otot jantung sehingga menurunkan tekanan darah.

**Tujuan:** Untuk mengetahui pengaruh tingkat aktivitas fisik harian dalam upaya penurunan tekanan darah.

**Metode:** Metode penelitian yang digunakan ialah penelitian eksperimental semu. Cara penetapan sampel menggunakan metode *purposive sampling* yaitu sampel ditetapkan berdasarkan tujuan penelitian. Responden yang terlibat ialah karyawan *cleaning service* Universitas YARSI. Pengukuran tekanan darah *pre* dan *post test* dilakukan menggunakan riester *sphygmomanometer* air raksa pada pagi hari pukul 07.00-08.00 WIB. Penilaian aktivitas fisik dasar dilakukan menggunakan kuisioner IPAQ selama 6 minggu. Data diolah dengan uji statistik *t – Test* menggunakan *Microsoft office excel 2013*.

**Hasil:** Berdasarkan hasil pengukuran diperoleh hasil rerata dan selisih tekanan darah sistol *pre-post test* sebesar  $(104,80 \pm 5,86)$  mmHg dan  $(-5,20 \pm 7,70)$  mmHg ( $p=0,002$ ). Rerata dan selisih tekanan darah diastol *pre-post test* sebesar  $(71,60 \pm 9,87)$  mmHg dan  $(0 \pm 7,07)$  mmHg ( $p>0,5$ ). Nilai rerata tertinggi aktivitas yang dilakukan responden adalah aktivitas fisik sedang, yaitu sebanyak  $(38,82 \pm 13,24)$  jam/minggu. Berdasarkan hasil tersebut tekanan darah sistol memiliki hasil yang signifikan dibandingkan dengan variabel lain.

**Kesimpulan:** Terdapat penurunan bermakna pada tekanan darah sistolik karyawan *cleaning service* pada aktivitas fisik harian sedang. Hasil pengamatan tekanan darah diastol menunjukkan penurunan tidak bermakna, namun terdapat kecenderungan menurunkan tekanan darah diastol. Melakukan aktivitas fisik harian yang cukup dalam islam wajib dilakukan untuk menghindari penyakit yang merupakan *mudharat*.

**Kata Kunci:** Aktivitas fisik, hipertensi, karyawan *cleaning service*, pandangan Islam

## **THE INFLUENCES OF DAILY PHYSICAL ACTIVITIES LEVELS ON BLOOD PRESSURE IN EMPLOYEE CLEANING SERVICE IN YARSI UNIVERSITY AND ASSESSED FROM ISLAMIC SIDE**

**Amalia Maulida<sup>1</sup> Diniwati Mukhtar<sup>2</sup> Amir Mahmud<sup>3</sup> Qomariyah RS<sup>4</sup>**

<sup>1</sup> Student of the Faculty of Medicine, YARSI University

<sup>2</sup> Teaching Staff in the Department of Physiology at the Faculty of Medicine, YARSI University

<sup>3</sup> Teaching Staff in the Department of Islamic Study, Faculty of Medicine, YARSI University

<sup>4</sup> Teaching Staff of the Physiology Section of the Faculty of Medicine, YARSI University

### **ABSTRACT**

**Background:** Cardiovascular disease which includes non communicable disease is still a problem in various parts of the world. A sufficient daily physical activity will cause a decrease in peripheral resistance and relaxation of the heart muscle thereby reducing blood pressure.

**Objective:** To determine the effect of the level of daily physical activity in an effort to decrease blood pressure.

**Method:** This research method was quasi-experimental research. The method of determining the sample using purposive sampling method, the sample is determined based on the research objectives. The respondents involved were cleaning service employees of the YARSI University. Blood pressure measurements pre and post test performed using a mercury sphygmomanometer Riester in the morning at 07:00 to 8:00 pm. Assessment of basic physical activity performed using the IPAQ questionnaire for 6 weeks. Data is processed by t-Test statistical tests using Microsoft Office Excel 2013.

**Results:** Based on the results of the measurements obtained the mean and difference in pre-post test systolic blood pressure was  $(104.80 \pm 5.86)$  mmHg and  $(-5.20 \pm 7.70)$  mmHg ( $p = 0.002$ ). The mean and difference in pre-post test diastolic blood pressure was  $(71.60 \pm 9.87)$  mmHg and  $(0 \pm 7.07)$  mmHg ( $p > 0.5$ ). The highest average value of activities carried out by respondents is moderate physical activity, which is as much as  $(38.82 \pm 13.24)$  hours / week. Based on these results, systolic blood pressure has significant results compared to other variables.

**Conclusion:** There was a significant decrease in systolic blood pressure of cleaning service employees on moderate daily physical activity, but for diastolic blood pressure the decrease was not significant. Adequate daily physical activity in Islam must be done to avoid the *mudharat*.

**Keywords:** Physical activity, hypertension, employees of Cleaning service, Islamic view