

**THE DIFFERENCES IN FASTING BLOOD SUGAR LEVELS IN  
MORNING, AFTERNOON AND NIGHT SHIFT WORKERS AT  
MUHAMMADIYAH UNIVERSITY OF YOGYAKARTA**

**PERBEDAAN KADAR GULA DARAH PUASA PADA PEKERJA SHIFT  
PAGI, SIANG DAN MALAM DI UNIVERSITAS MUHAMMADIYAH  
YOGYAKARTA**

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**Abstrak**

Shift work is a system of working time which is given in turns within 24 hours, divided into 3 times that is morning, afternoon, and night. The high rate of work accident can occur because work time changes which is caused by fatigue, besides that it also has an impact on GDP level of personnel, which one the changes can cause health problems. The aim of the research is to determine the difference, the average value of fasting blood sugar levels of morning shift security, day shift, and night shift at Universitas Muhammadiyah Yogyakarta.

The design of this research was descriptive comparative non-experimental. That is measuring the fasting blood sugar level with a cross sectional approach, with 21 respondents who were shift security workers in Universitas Muhammadiyah Yogyakarta. Data analysis techniques are carried out in univariate and bivariate. The statistical test was carried out by the Shapiro-Wilk normality test. And then to the Biravare analysis using the Independent-Samples Krukak-Wallis Test.

The results obtained from the analysis that showed there were no difference in fasting blood sugar levels (0.425;  $p > 0.05$ ). Therefore the hypothesis is accepted.

**Keywords: Fasting blood sugar levels, morning shift workers, day and night.**

## INTISARI

Kerja shift merupakan system waktu kerja yang diberikan secara bergilir dalam waktu 24 jam, terbagi dalam 3 waktu yaitu pagi, siang dan malam. Tingginya angka kecelakaan kerja dapat terjadi karena perubahan waktu kerja disebabkan karena kelelahan, selain itu juga berdampak pada perubahan kadar GDP seseorang, dimana perubahan tersebut dapat menyebabkan gangguan kesehatan. Penelitian ini bertujuan untuk mengetahui perbedaan, rerata nilai kadar gula darah puasa pekerja shift security pagi, siang dan malam di Universitas Muhammadiyah Yogyakarta.

Desain penelitian ini bersifat descriptive comparative non-experimental melakukan pengukuran nilai kadar gula darah puasa dengan pendekatan cross sectionl, dengan jumlah sampel 21 responden pekerja shift security yang bekerja di kampus Universitas Muhammadiyah Yogyakarta. Teknik analisa data yang dilakukan secara univariat dan bivariate. Uji statistic dilakukan dengan uji normalitas Shapiro-Wilk untuk analisis bivariate menggunakan uji IndependentSamples Krukal-Wallis Test.

Hasil penelitian yang didapatkan dari hasil analisis menunjukkan bahwa tidak terdapat perbedaan kadar gula darah puasa pada pekerja shift security pagi, siang dan malam di Universitas Muhammadiyah Yogyakarta ( 0. 425 ;  $p>0,05$ ). Dengan demikian hipotesis diterima.

**Kata Kunci** : Kadar Gula darah puasa, pekerja shift pagi, siang dan malam.