HUBUNGAN ANTARA JUMLAH KENDARAAN PADA SAAT *WEEKDAY* DAN *WEEKEND* DENGAN KADAR KARBON MONOKSIDA (CO) DI SEKITAR KANTONG PARKIR KOTA YOGYAKARTA

Silvia Ningsih[1], Naris Dyah Prasetyawati[1], Sigid Sudaryanto[1], Adib Suyanto[1]
[1]Jurusan Kesehatan Lingkungan Poltekkes Kemenkes Yogyakarta
Jl. Titibumi No.3 Banyuraden, Gamping, Sleman, Yogyakarta 55293
Email: silvianingsih99@gmail.com

INTISARI

Latar Belakang: Udara terdiri dari berbagai gas, dengan Karbon Monoksida (CO) sebagai salah satu polutan utama yang mempengaruhi kualitas udara. Peningkatan aktivitas industri dan transportasi menurunkan kualitas udara, terutama di perkotaan seperti Yogyakarta.
Tujuan: Mengetahui kadar Karbon Monoksida (CO) pada saat *Weekday* dan *Weekend* di sekitar kantong Parkir di Kota Yogyakarta.
Metode: Jenis penelitian yang dilakukan adalah *Cross Sectional*, Teknik sampling yang digunakan dalam penelitian ini adalah *Purposive sampling*, Penelitian ini dilakukan pada bulan Juli-Agustus 2024.
Hasil: Penelitian ini mengukur kadar karbon monoksida (CO) di lima lokasi parkir di Kota Yogyakarta selama *weekday* dan *weekend*. Kadar karbon monoksida (CO) bervariasi tergantung lokasi, hari, dan waktu pengukuran. Parkir Abu Bakar Ali mencatat kadar karbon monoksida (CO) tertinggi pada Selasa sore (36.600 µg/m³), sedangkan Parkir Beskalan memiliki kadar karbon monoksida (CO) terendah, bahkan mencapai 0 µg/m³ pada beberapa waktu. Uj*i Man Whitney* menunjukkan tidak ada perbedaan signifikan kadar karbon monoksida (CO) antara *weekday* dan *weekend*. Namun, uji Korelasi Pearson mengungkapkan hubungan signifikan antara jumlah kendaraan dengan kadar karbon monoksida (CO) di semua lokasi pada *weekday* dan *weekend*, dengan peningkatan kendaraan yang berhubungan dengan peningkatan kadar karbon monoksida (CO).
Kesimpulan: Terdapat hubungan signifikan antara jumlah kendaraan dan kadar karbon monoksida (CO) di semua lokasi parkir. Peningkatan kendaraan berkorelasi dengan peningkatan kadar karbon monoksida (CO), menunjukkan potensi pencemaran udara, terutama di lokasi ramai seperti Parkir Wisata Ngabean.
Kata Kunci: karbon monoksida (CO), jumlah kendaraan

RELATIONSHIP BETWEEN VEHICLE DENSITY DURING WEEKDAYS AND WEEKENDS WITH CARBON MONOXIDE (CO) LEVELS AROUND PARKING AREAS IN YOGYAKARTA CITY

Silvia Ningsih[1], Naris Dyah Prasetyawati[1], Sigid Sudaryanto[1], Adib Suyanto[1]
[1]Jurusan Kesehatan Lingkungan Poltekkes Kemenkes Yogyakarta
Jl. Titibumi No.3 Banyuraden, Gamping, Sleman, Yogyakarta 55293
Email: silvianingsih99@gmail.com

ABSTRACT

Background: *Air consists of various gases, with Carbon Monoxide (CO) as one of the main pollutants that affect air quality. Increased industrial and transportation activities reduce air quality, especially in urban areas such as Yogyakarta.*
Objective: *To determine the levels of Carbon Monoxide (CO) during Weekdays and Weekends around Parking pockets in the City of Yogyakarta.*
Method: The type of research conducted is Cross Sectional, The sampling technique used in this study is Purposive sampling, This study was conducted in July-August 2024.
Results: *This study measured carbon monoxide (CO) levels in five parking locations in the City of Yogyakarta during weekdays and weekends. Carbon monoxide (CO) levels vary depending on location, day, and time of measurement. Abu Bakar Ali Parking recorded the highest carbon monoxide (CO) levels on Tuesday afternoon (36,600 µg/m³), while Beskalan Parking had the lowest carbon monoxide (CO) levels, even reaching 0 µg/m³ at some times. The Man Whitney test showed no significant difference in carbon monoxide (CO) levels between weekdays and weekends. However, Pearson Correlation test revealed a significant relationship between the number of vehicles and carbon monoxide (CO) levels in all locations on weekdays and weekends, with an increase in vehicles associated with an increase in carbon monoxide (CO) levels.*
Conclusion: *There is a significant relationship between the number of vehicles and carbon monoxide (CO) levels in all parking locations. An increase in vehicles is correlated with an increase in carbon monoxide (CO) levels, indicating potential air pollution, especially in busy locations such as Ngabean Tourism Parking.*
Keywords: *carbon monoxide (CO), number of vehicles*