

ABSTRAK

Latar belakang: Peningkatan suhu akibat perubahan iklim berpotensi menimbulkan dampak kesehatan, terutama pada lansia. Selain itu, kondisi rumah tinggal memengaruhi suhu dalam ruangan dan tingkat risiko heat stress. Penelitian ini bertujuan menganalisis pengaruh perbedaan suhu *indoor-outdoor* dan kualitas rumah tinggal terhadap risiko heat stress pada lansia di wilayah ProKlim Provinsi DIY.

Metode: Penelitian *cross-sectional* ini melibatkan 165 lansia (>60 tahun) di kampung ProKlim pada lima kabupaten/kota di Provinsi DIY. Data dikumpulkan melalui kuesioner, observasi kualitas rumah tinggal, pengukuran suhu dan kelembaban menggunakan *thermohygrometer* (*indoor*), serta data BMKG (*outdoor*). Analisis dilakukan menggunakan regresi logistik ordinal dengan paket MASS pada perangkat lunak R.

Hasil: Perbedaan suhu *indoor-outdoor* (ΔT) berhubungan signifikan dengan heat stress pada lansia (OR=1,32; 95% CI: 1,10–1,59). Kualitas rumah tinggal tidak menunjukkan hubungan yang signifikan meskipun rumah dengan kualitas kurang cenderung memiliki risiko heat stress lebih tinggi (OR=2,66; 95% CI: 0,99–7,13), dan usia menunjukkan hubungan negatif terhadap heat stress (OR=0,95; 95% CI: 0,91–0,99). Variabel kontrol lainnya tidak menunjukkan hubungan yang signifikan dengan *heat stress*.

Kesimpulan: Perbedaan suhu *indoor-outdoor* berpengaruh terhadap risiko heat stress pada lansia. Semakin besar perbedaan suhu, maka risiko lansia mengalami heat stress juga semakin meningkat. Sementara itu, kualitas rumah tinggal belum menunjukkan pengaruh langsung terhadap heat stress. Namun, kualitas rumah yang kurang dapat meningkatkan risiko terjadinya heat stress dibandingkan rumah yang baik. Oleh karena itu, pentingnya menjaga kondisi termal rumah agar tetap nyaman sebagai upaya mengurangi risiko heat stress pada lansia di wilayah Kampung Iklim.

Kata kunci: perubahan iklim, *heat-related illness*, kelompok rentan, kualitas rumah, suhu lingkungan

ABSTRACT

Background: *Rising temperatures due to climate change have the potential to cause health impacts, particularly among the elderly. In addition, housing conditions influence indoor temperatures and the risk of heat stress. This study aims to analyze the effects of indoor-outdoor temperature differences and housing quality on the risk of heat stress among the elderly in the ProKlim region of Yogyakarta Special Province.*

Methods: *This cross-sectional study involved 165 older adults (age 60+) in ProKlim villages across five districts/cities in the Special Region of Yogyakarta. Data were collected through questionnaires, observations of housing quality, and measurements of temperature and humidity using thermohygrometers (indoor) and data from the Indonesian Meteorological, Climatological, and Geophysical Agency (BMKG) (outdoor). The analysis was conducted using ordinal logistic regression with the MASS package in R.*

Results: *The indoor-outdoor temperature difference (ΔT) was significantly associated with heat stress in older adults (OR = 1.32; 95% CI: 1.10–1.59). Housing quality did not show a significant association, although homes of lower quality tended to have a higher risk of heat stress (OR=2.66; 95% CI: 0.99–7.13), and age showed a negative association with heat stress (OR=0.95; 95% CI: 0.91–0.99). Meanwhile, the other control variables did not show a significant association with heat stress.*

Conclusion: *The difference in temperature between indoors and outdoors affects the risk of heat stress in older adults. The greater the temperature difference, the higher the risk of older adults experiencing heat stress. Meanwhile, housing quality has not been shown to have a direct impact on heat stress. However, poor housing quality can increase the risk of heat stress compared to well-maintained homes. Therefore, it is important to maintain comfortable indoor thermal conditions as a measure to reduce the risk of heat stress among the elderly in the Kampung Iklim area.*

Keywords: *climate change, heat-related illness, vulnerable groups, healthy housing, environmental temperature*