

## ABSTRAK

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HUBUNGAN POLUSI UDARA DENGAN KUALITAS HIDUP PASIEN PEREMPUAN ARTRITIS REUMATOID DI SILOAM HOSPITALS LIPPO VILLAGE GEDUNG B

(xiii + 95 halaman + 0 Gambar + 3 Bagan + 13 Tabel + 9 Lampiran)

**Latar belakang:** Artritis Reumatoid adalah penyakit autoimun yang menyerang persedian. Meskipun etiologi dari penyakit ini belum diketahui dengan jelas, faktor lingkungan seperti polusi udara dapat berkontribusi dalam terbentuknya autoantibodi dan aktivitas penyakit AR sehingga nantinya dapat memengaruhi kualitas hidup penderita AR. Prevalensi peningkatan polusi udara dan faktor-faktor yang memengaruhinya pada pasien AR masih perlu diteliti lebih lanjut.

**Tujuan:** Mengetahui hubungan antara polusi udara dan faktor – faktor yang berhubungan dengan kualitas hidup pada pasien perempuan AR di Siloam Hospital Lippo Village Gedung B periode Mei – Juli 2024.

**Metode:** Penelitian ini dilakukan pada bulan Mei – Juli 2024 secara potong lintang terhadap 53 subjek yang berobat di Poliklinik Alergi Imunologi Rumah Sakit Siloam Lippo Village Gedung B sesuai dengan kriteria inklusi dan eksklusi. Analisis bivariat dengan uji *Chi Square* dan regresi logistik untuk multivariat.

**Hasil:** Data kunjungan pertama ( $p = 0,661$ ) dan kedua ( $p = 0,667$ ) disimpulkan tidak adanya hubungan yang signifikan antara polusi udara dengan kualitas hidup pada pasien perempuan AR di Siloam Hospital Lippo Village Gedung B. Prevalensi responden yang mengalami polusi udara buruk adalah 86,79% ( $n=46$ ). Dilakukan analisis bivariat, kualitas hidup pasien AR memiliki hubungan yang signifikan dengan derajat limitasi dan fungsi ( $p < 0,05$ ) dan hasil  $OR = 4,929$  (95% CI = 1,327-18,307) pada kunjungan pertama dan  $OR = 13,263$  (95% CI = 1,573-111,864) pada kunjungan kedua. Hasil dari regresi logistik menunjukkan hasil  $OR = 4,728$  (95% CI = 1,148-19,477) pada kunjungan pertama dan pada kunjungan kedua  $OR = 18,170$  (95% CI = 1,712-192,859) untuk kualitas pasien AR setelah disesuaikan dengan variabel derajat limitasi dan fungsi ( $p < 0,05$ ). Tidak terdapat hubungan yang signifikan antara rawat inap, aktivitas penyakit, nyeri, ansietas, dan depresi terhadap kualitas hidup.

**Kesimpulan:** Polusi udara yang terpapar dengan pasien AR mayoritas buruk berdasarkan Indeks Kualitas Udara, tetapi tidak memiliki pengaruh terhadap kualitas hidup pasien AR. Sementara itu, derajat limitasi dan fungsi memiliki pengaruh yang signifikan terhadap kualitas hidup pasien AR.

**Kata Kunci:** Artritis Reumatoid, Kualitas Hidup, Polusi Udara

**Referensi:** 42 (2001 - 2023)

## ABSTRACT

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THE RELATIONSHIP BETWEEN AIR POLLUTION AND QUALITY OF LIFE IN FEMALE RHEUMATOID ARTHRITIS PATIENTS AT SILOAM HOSPITAL LIPPO VILLAGE BUILDING B

(xiii + 95 pages + 0 Figures + 3 Diagrams + 13 Tables + 9 Appendices)

**Background:** Rheumatoid Arthritis (RA) is an autoimmune disease that affects the joints. Although the exact etiology of the disease is not yet clearly understood, environmental factors such as air pollution may contribute to the formation of autoantibodies and the activity of RA, thereby affecting the quality of life of RA patients. The prevalence of increased air pollution and its contributing factors in RA patients requires further investigation.

**Objective:** To examine the relationship between air pollution and factors related to the quality of life in female RA patients at Siloam Hospital Lippo Village Building B during the period of May – July 2024.

**Methods:** This cross-sectional study was conducted from May to July 2024 involving 53 subjects receiving treatment at the Allergy Immunology Clinic of Siloam Hospital Lippo Village Building B, based on inclusion and exclusion criteria. Bivariate analysis was performed using the Chi-Square test, and multivariate analysis was conducted using logistic regression.

**Results:** The data from the first visit ( $p = 0.661$ ) and second visit ( $p = 0.667$ ) showed no significant relationship between air pollution and quality of life in female RA patients at Siloam Hospital Lippo Village Building B. The prevalence of respondents exposed to poor air pollution was 86.79% ( $n=46$ ). Bivariate analysis revealed a significant relationship between the quality of life and the degree of functional limitation ( $p < 0.05$ ), with an OR of 4.929 (95% CI = 1.327–18.307) at the first visit and an OR of 13.263 (95% CI = 1.573–111.864) at the second visit. Logistic regression results indicated an OR of 4.728 (95% CI = 1.148–19.477) at the first visit and an OR of 18.170 (95% CI = 1.712–192.859) at the second visit for quality of life after adjusting for the degree of functional limitation ( $p < 0.05$ ). There was no significant relationship between hospitalization, disease activity, pain, anxiety, and depression with quality of life.

**Conclusion:** Although most patients with RA were exposed to poor air quality based on the Air Quality Index, air pollution did not have a significant impact on their quality of life. However, the degree of functional limitation significantly affected the quality of life in RA patients.

**Keywords:** Rheumatoid Arthritis, Quality of Life, Air Pollution

**References:** 42 (2001–2023)