

## ABSTRAK

**Latar Belakang** : Sindrom Sjogren adalah penyakit autoimun yang umumnya ditandai dengan gejala kekeringan pada mata, hidung, dan mulut. Aktivitas penyakit ini dapat dipengaruhi oleh berbagai faktor, salah satunya adalah kualitas udara. Polusi udara yang buruk dapat meningkatkan aktivitas penyakit, baik gejala glandular maupun ekstraglandular. Faktor-faktor ini berpotensi memperburuk kualitas hidup pasien Sindrom Sjogren, sehingga perlu dilakukan penelitian lebih lanjut untuk mengetahui hubungan antara polusi udara dan kualitas hidup pasien.

**Tujuan Penelitian** : Mengetahui hubungan antara polusi udara dan faktor – faktor lain terhadap kualitas hidup pasien Sindrom Sjogren di Rumah Sakit Siloam Lippo Village Karawaci.

**Metode** : Penelitian dilakukan pada Mei hingga Juli 2024. Pengambilan data dilakukan secara potong lintang pada 66 subjek yang berobat di Poliklinik Alergi Imunologi Rumah Sakit Siloam Lippo Village Karawaci dan memenuhi kriteria inklusi. Analisis bivariat dilakukan menggunakan uji Independent T-test dan Mann-Whitney U, sementara analisis multivariat menggunakan uji regresi linier.

**Hasil** : Pada kunjungan pertama ( $p = 0,291$ ) dan kedua ( $p = 0,678$ ), tidak ditemukan hubungan signifikan antara polusi udara dan kualitas hidup pasien Sindrom Sjogren di RS Siloam Lippo Village, meskipun 97% ( $n = 54$ ) subjek terpapar polusi udara buruk. Namun, analisis bivariat menunjukkan hubungan signifikan antara polusi udara dan aktivitas penyakit, terutama pada domain kekeringan. Analisis multivariat regresi linier menunjukkan bahwa pada kunjungan pertama pada kunjungan pertama [1,684 (1,375–2,063)] dan kedua [2,2 (0,131–36,974)]. Beberapa faktor yang signifikan terhadap kualitas hidup adalah depresi ( $\beta = 17,692$ ), kelelahan ( $\beta = -5,931$ ), nyeri ( $\beta = -6,366$ ), dan kekeringan ( $\beta = -6,428$ ), dengan R square 0,602. Pada kunjungan kedua, hasilnya serupa dengan R square 0,565. Tidak ditemukan hubungan antara kualitas hidup dengan usia, sosioekonomi, atau rawat inap.

**Kesimpulan** : Polusi udara tidak memiliki pengaruh langsung terhadap kualitas hidup pasien, walaupun mayoritas pasien di Rumah Sakit Siloam Lippo Village Karawaci terpapar oleh kualitas udara yang buruk berdasarkan Indeks Kualitas Udara. Sedangkan, aktivitas penyakit dan status psikologis pasien memiliki pengaruh yang signifikan terhadap kualitas hidup pasien Sindrom Sjogren.

**Referensi** : 56

**Kata kunci** : Sindrom Sjogren, Kualitas udara, Polusi udara, Kualitas hidup

## **ABSTRACT**

**Background :** Sjogren's syndrome is an autoimmune disease that is generally characterized by symptoms of dry eyes, nose, and mouth. The activity of this disease can be influenced by various factors, one of which is air quality. Bad air pollution can increase disease activity, both glandular and extraglandular symptoms. These factors have the potential to worsen the quality of life of Sjogren's Syndrome patients, so further research is needed to determine the relationship between air pollution and patient quality of life.

**Objective :** Determine the relationship between air pollution and other factors on the quality of life of Sjogren's Syndrome patients at Siloam Hospital Lippo Village Karawaci.

**Method :** The research was conducted from May to July 2024. Data collection was conducted cross-sectionally on 66 subjects who were treated at the Allergy Immunology Polyclinic, Siloam Hospital, Lippo Village Karawaci and met the inclusion criteria. Bivariate analysis was performed using the Independent T-test and Mann-Whitney U test, while multivariate analysis uses linear regression test.

**Result :** At the first ( $p = 0.291$ ) and second ( $p = 0.678$ ) visits, no significant relationship was found between air pollution and quality of life of Sjogren's Syndrome patients at Siloam Lippo Village Hospital, although 97% ( $n = 54$ ) of subjects were exposed to bad air pollution. However, bivariate analysis showed a significant association between air pollution and disease activity, especially in the Dryness domain. Multivariate linear regression analysis showed that at the first visit [1.684 (1.375–2.063)] and the second [2.2 (0.131–36.974)]. Several factors that were significant for quality of life were depression ( $\beta = 17.692$ ), fatigue ( $\beta = -5.931$ ), pain ( $\beta = -6.366$ ), and dryness ( $\beta = -6.428$ ), with an R square of 0.602. On the second visit, the results were similar with an R square of 0.565. No association was found between quality of life and age, socioeconomics, or hospitalization.

**Conclusion :** Air pollution does not have a direct impact on the quality of life of patients, although the majority of patients at Siloam Lippo Village Karawaci Hospital are exposed to poor air quality based on the Air Quality Index. Meanwhile, disease activity and patient psychological status have a significant influence on the quality of life of Sjogren's Syndrome patients.

**References :** 56

**Keywords :** Sjogren Syndrome, Air Quality, Air Pollution, Quality of Life