

Estimating the outcome disparities in BIPOC and economically-disadvantaged patients with systemic lupus erythematosus (SLE)

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Background

- Systemic lupus erythematosus (SLE) is a complex autoimmune disease with heterogeneous presentation and progression, posing significant treatment challenges.
- Despite medical advances, SLE's burden disproportionately affects the BIPOC population and individuals of lower socioeconomic status.

Objectives

- This study aims to provide an understanding of SLE care disparities, examining mortality rates, treatment accessibility, and the impact of social determinants of health.

Methods

- Our study involved a literature search on PubMed, spanning from 2018 to 2023. We combined key terms related to SLE, Medicaid, health disparities, and treatment patterns, aiming to collate studies addressing treatment disparities in minority and economically-disadvantaged SLE patients in the U.S.
- There were exclusion criteria for age, region, and context.

Results

After applying the exclusion criteria, the search resulted in 43 relevant studies.

Prevalence ¹

- The prevalence of SLE was 195 per 100,000, with greater prevalence observed in the US South, African American population, and females.

Mortality ²

- The literature found notable disparities in SLE mortality rates, with increased mortality in African American, Hispanic American, and low socioeconomic individuals.

Hospitalization ³

- Hospitalization trends showed an increase in African American patient hospitalizations from 37.7% to 44.7% over two decades, alongside similar trends in Hispanic and Asian patients.

Disease duration ⁴

- A significant difference was noted in SLE disease duration, notably greater in African Americans (15 years) compared with non-Hispanic Whites (8 years).

Complications ⁵

- In SLE patients, the literature showed an increase in risk of severe COVID-19 outcomes in African American (OR 2.73) and Hispanic (OR 2.76) SLE patients compared to White patients.

Table 1. Summary of different disparities associated with SLE

Disparity Factor	Impact on Mortality
Race/Ethnicity	African American and Hispanic origin associated with increased mortality
Socioeconomic Status	Low socioeconomic status linked to higher mortality
Gender	Male sex correlated with increased mortality
Socioeconomic Factor	Impact on Disease Management and Outcomes
Financial Strain	High financial strain predicts new-onset depression and affects patient-reported outcomes
Healthcare Access	Poor access linked to delays in diagnosis and treatment
Disparity Factor	Impact on Hospitalization
Race/Ethnicity	Increased hospitalization rate among African American/Hispanic patients
Disparity Factor	COVID-19 Complications
Race/Ethnicity	Increased risk of severe COVID-19 among African American and Hispanic patients

Conclusion

- This study underscores significant health equity issues in SLE treatment, especially affecting BIPOC and low-income populations. Healthcare systems and policies must be restructured to provide equitable access and treatment, considering the social, economic, and cultural contexts of SLE patients.

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