Adegunsoye at al\(^1\) performed a retrospective analysis of outcomes in patients with pulmonary fibrosis (PF), stratified by age and by race and ethnicity. Using a large cohort of 1904 patients from the Pulmonary Fibrosis Foundation’s extensive database of patients with PF from across the US, they validated that cohort with their own registry encompassing 4 separate centers (\(n = 2888\)). Their results showed that Black patients were consistently younger than Hispanic and White patients at diagnosis and were more likely to be hospitalized, receive a lung transplant, and die at younger ages.

Within this cohort, patients were also stratified by type of PF, addressing the most common types: connective tissue disease–related interstitial lung disease (CTD-ILD), idiopathic PF (IPF), and fibrotic hypersensitivity pneumonitis (fHP). Adegunsoye at al\(^1\) reported that within this cohort, Black patients more commonly had CTD-ILD; Hispanic patients, fHP; and White patients, IPF.

The strengths of the study include the size of the cohorts and the validation of the first cohort with the second. Because these patients were seen at tertiary centers of excellence, it is likely that they had the correct diagnosis and subtypes.

There are several limitations of the study. First, regarding time to diagnosis, patients already may have been diagnosed for some time before arrival at the center, which may result in a lead-time bias. Second, Black and Hispanic patients were only 16.8% of the cohort and were imbalanced between the subgroups of PF. This may have affected the findings of more frequent hospitalizations and earlier transplant times, given that Black women have been shown to be more prone to develop connective tissue disease and have more frequent hospitalizations.\(^2\) Third, follow-up time was limited to 3 years, limiting assessment of long-term survival.

Pulmonary fibrosis ILD is considered a uniformly fatal disorder.\(^3\) Insidious in onset and relentlessly progressive, it renders patients breathless and frustrated, with no hope for cure outside of a lung transplant. A typical presentation includes a chronic cough with or without mild dyspnea on exertion in the fifth or sixth decade of life. A combination of these nondescript symptoms and a lack of awareness often lead to a delayed diagnosis and more advanced disease at presentation. At present, time to diagnosis is, on average, 2 to 4 years.\(^4\)

Early referral of patients with PF allows for an accurate diagnosis of fibrotic subtype and/or identification of underlying causes such as medications, occupational or environmental exposures, or underlying autoimmune disorders. Additionally, early referral allows time for education; intervention with therapies addressing underlying causes, when identified; the initiation of antifibrotic agents that, while not able to reverse or stop the fibrosis, can abrogate the rate of fibrosis, as evidenced by the ASCEND, INPULSIS, and INBUILD trials\(^5-7\); and transplant referral when indicated. While imperfect, antifibrotic agents were the first drugs to show any effect on the management of PF. Despite this, only 25% of patients who qualify are prescribed these medications.\(^7\)

While Adegunsoye at al\(^1\) did not comment on disparities in therapy, interestingly in both cohorts in their study, very few patients in all groups were taking antifibrotic agents, and a substantial number of Black patients were taking corticosteroids, which in themselves can cause considerable morbidity. This may have been a confounding factor in the noted increased time to hospitalization and possibly the suggested increased mortality as well.

The authors attempted to shine a light on some of the disparities seen in PF-ILD that have not yet been aggressively explored, identified, or addressed. Their study suggests opportunities for additional research, recognition, diagnosis, and management of ILD in vulnerable and racial and ethnic minority populations.
The study raises questions around the underlying physiologic processes driving the observed earlier onset of PF in Black patients in all subgroups and, more specifically, why it is more frequently diagnosed in patients with autoimmune disorders, and why in Black women. How much is attributable to the social determinants of health? How much to genetic factors? While understanding the health care disparities involved in PF is important, we must not forget the important role of genomics in the mechanisms underlying disease development. We do not yet understand how the social determinants of health interact to affect the biology or genetics influencing ILD development or severity. To date, in PF, most of the genomic studies have been conducted in IPF, which occurs predominantly in White men. The study by Adegunsoye at al1 was not designed to study genetics, but the results suggest this question should be addressed at the intersection of race and ethnicity, sex, gender, socioeconomic status, and diagnosis to fully understand how these may also affect outcomes.

In calling for more studies to be performed, we must be mindful of the fact that recruitment of racial and ethnic minority populations into trials and registries has historically been difficult for a number of reasons. A recent American Thoracic Society workshop identified several barriers to recruitment of racial and ethnic minority individuals into clinical trials. The workshop noted these barriers included mistrust of the medical community, racial and implicit bias, social and structural barriers to participation, and financial needs. In some instances, primary care physicians themselves are barriers to referring to clinical trials.8

Even so, it is not enough to simply identify the problem; we must also find solutions. If patients cannot come to the center, perhaps it is time the center goes to the patient, becoming entrenched in the community and forming relationships with community physicians. They are the access point to the system and will see these patients long before they get to a tertiary center. The center may need to provide transportation and appointments outside office hours so patients do not have to miss work, and investigators themselves will need to assess their own internal biases to reach these communities as we strive to resolve these issues.

To move the needle forward, the medical community must invest in racial and ethnic minority populations, working collaboratively to create a pipeline to tertiary care centers in all areas of research. The pipeline will need to flow both ways, from the tertiary care center into the local communities and back to the center. Policies must be developed that would advocate for these patients to be seen and treated in these centers. Future policies and studies should be designed to take this into consideration.

**ARTICLE INFORMATION**

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