

Study Title: Exploring the Impact of Social Determinants of Health on Time to Diagnosis, Treatment Access, and Outcomes in Myasthenia Gravis Patients

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Background

Myasthenia gravis (MG) is a rare autoimmune disorder of the neuromuscular junction characterized by fluctuating weakness of ocular, bulbar, respiratory, and limb muscles. In the US, significant racial and socioeconomic differences exist in healthcare access and utilization in general and in treatment utilization and outcomes among MG patients specifically. International studies suggest diagnostic delays are common, but little is known about how social determinants of health (SDOH) affect MG care within the U.S. healthcare system. Understanding these influences is critical to addressing inequities in MG care.

Objective

The primary objective of this study is to investigate how social determinants of health (SDOH) influence diagnostic timelines, treatment access, and clinical outcomes in patients with myasthenia gravis (MG).

Methods

We conducted a mixed-methods, cross-sectional study integrating retrospective cohort analysis with semi structured patient interviews. A cohort of 100 patients with generalized MG at UCHHealth was reviewed for demographic, clinical, and SDOH variables, including diagnostic timelines, treatment utilization, and hospitalization rates. In parallel, up to 20 patients with generalized MG who received care in the past two years completed ~60-minute semi structured interviews exploring diagnostic experiences, access to specialty care, and treatment perceptions, alongside validated MG outcome measures (MGQOL15r, MG-ADL, MGC). Interviews were recorded, transcribed, thematically analyzed, and linked with quantitative outcomes. Associations between SDOH, diagnostic delays, and treatment disparities were assessed.

Results

Initial analysis indicates that women initiated treatment significantly later than men. Further analyses are ongoing to evaluate trends by ethnicity/race, age, and RUCA classification (urban versus rural). In addition, semi-structured interviews are being analysed to capture patient perspectives and provide further context for the quantitative findings.

Conclusion

This mixed-methods study highlights the role of SDOH in shaping diagnostic delays, treatment access, and outcomes in MG. By combining clinical data with patient perspectives, this work aims to identify modifiable barriers and inform interventions to reduce disparities in MG management.