

## Relationship of Depression to Sickle Cell Disease Severity, Health Care Utilization and Quality of Life

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### Description

This project examined the relationship between measures of sickle cell disease (SCD) severity, depression, health care utilization, and quality of life. Among a study population of 150 adult SCD patients, data were collected on standardized test results, clinical and medical care utilization, expenditures, depression, quality of life, disease severity, and neurocognitive function. Self-reported rates of depression, suicidal ideation, and suicide attempts were evaluated in 30 male and 37 female African American patients.

### Specific Aims

1. Determine the prevalence of depression in adult SCD patients and its association with various disease characteristics.
2. Determine the relationship between depression and the use of medical care by SCD patients.
3. Identify the association of depression with quality-of-life measures in SCD patients.

### Findings

- About one-third of the patients had depression, and they were more likely to be female and have more severe disease.
- Compared to patients without depression, those with depression had more hospital admissions, spent more days in the hospital, and had higher inpatient costs.
- Patients with depression had significantly lower quality of life than patients without depression. Quality of life did not correlate with the severity of the disease.

### Main Objective

Examine the complex relationship between measures of sickle cell disease severity, depression, health care utilization, and quality of life.

### Chronic Conditions Considered

Sickle cell disease  
Depression

### Preventive Service Considered

This project did not address a specific clinical preventive service.

### Study Design, Data Sources & Sample Size

Self-reported survey

30 male and 37 female African American patients with sickle cell disease

### Strategies Addressed from the HHS Strategic Framework on Multiple Chronic Conditions

- 1.B. Define appropriate health care outcomes for individuals with multiple chronic conditions
- 4.B. Understand the epidemiology of multiple chronic conditions

# Relationship of Depression to Sickle Cell Disease Severity, Health Care Utilization and Quality of Life (Continued)

## Implications

Depression appears to represent a significant health care burden for patients with SCD, and efforts should be made to prevent, diagnose early, and intervene actively to reduce this burden and improve quality of life and other health outcomes among patients with SCD.

## Publications (as of September 2013)

Publications currently in preparation.

## Posters and Presentations

Kamble S, Reed SD, Flahiff C, Adam S, De Castro LM. Resource use and expenditures among adult sickle cell patients with and without depression. Poster presented at American Society of Hematology Annual Meeting; 2010 Dec 4-7; Orlando, Florida.

Adam S, Flahiff C, Jonassaint J, De Castro LM. The prevalence of depression in sickle cell disease: demographics and clinical relationship. Presentation at: Sickle Cell: the Next 100 Years; 2010 Apr 14-16; Leicester, UK.

De Castro LM, Adam S, Flahiff C, Abram M, Telen MJ. Quality of life outcomes in sickle cell disease: what happens if the patient also has depression? Presentation at: Sickle Cell: the Next 100 Years; 2010 Apr 14-16; Leicester, UK.

Adam S, Flahiff C, Abram M, Telen MJ, De Castro LM. The complex relationship between sickle cell disease and depression. Presentation at: National Conference on Blood Disorders in Public Health; 2010 Mar 9-11; Atlanta, Georgia.

Adam S, Flahiff C, Abram M, Telen MJ, De Castro LM. The complex relationship between sickle cell disease and depression. Poster presented at 2009 American Society of Hematology Annual Meeting; 2009 Dec 5-8; New Orleans, Louisiana.