

DEPRESSION, PAIN INTENSITY AND HOSPITALIZATION IN CHILDREN WITH SICKLE CELL DISEASE

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Background: Previous research has found that parental and child psychosocial functioning, most notably depression, are interrelated. Furthermore, depression has been found to exacerbate pain and other health outcomes in chronically ill samples. The objectives of the current study were to examine the relationship between parental and child depression, as well as the associations between parental/child depression, reported pain intensity, and hospital utilization among families of children with sickle cell disease (SCD).

Method: Participants were children with SCD, ages 7 to 15, and their parents. Children completed the Child Depression Inventory (CDI) and were asked to rate their average pain on a 10-point scale. Parents completed the Beck Depression Inventory (BDI) to assess their depressive symptoms, as well as a family demographics form. Medical records were reviewed for clinic visits, emergency room visits, and hospitalizations within the past two years. Analyses were conducted to obtain descriptive statistics and examine study goals.

Results: Twenty-seven children (3 sibling pairs), 24 mothers, and 10 fathers participated in the study. Fifty-four percent ($n = 13$) of sample had Sickle Cell Hemoglobin SS disease. Sixty-three percent ($n = 17$) of the sample was male. The SCD patients' ages ranged from 7 to 15 and had a mean age of 10.48 years. Fifty-five percent ($n = 15$) of the sample came from single parent households and 54% ($n = 13$) reported household incomes of \$30,000 or less. The demographics of this sample is representative of the general clinic population.

Prevalence of depression among sickle cell patients was 22% ($n = 6$) and 20.1% ($n=5$) among mothers. Mothers' BDI scores were positively correlated with their children's Interpersonal Problems scores on the CDI ($r = .506, p < .008$). Father's BDI scores were positively correlated with children's total CDI scores ($r = .640, p = .046$) and Ineffectiveness scores ($r = .644, p < .044$). Neither parental nor child depression scores were related with average pain intensity, emergency room visits, or the number of hospitalizations.

Conclusions: Findings were similar to previous literature citing a relationship between parent and child psychological functioning. These results support the need for family based interventions for children with SCD. The current study's results are not consistent with previous studies that found a relationship between depression and child's pain ratings and hospital utilization. Small sample size may have contributed to these non-significant findings and warrants further investigation.