

ABSTRACT

Introduction: Sickle cell disease is the most common hereditary disease known to cause death in children under five in Africa. Sickle cell trait is the benign form of the sickle cell disease. Individuals with sickle cell anemia manifest a lot of complications such as pain crisis; while those with trait remain asymptomatic, until exposed to adverse conditions that can trigger hemoglobin polymerization. In South Sudan, there is scarcity of data regarding the occurrence of sickle cell anemia or trait. Therefore this study was conducted with the aim of determining the prevalence of sickle cell trait among patients attending Juba Teaching Hospital.

Methodology: This was a cross-sectional study that recruited 384 patients attending Juba Teaching Hospital. Solubility screening technique was used. Venous blood samples were picked and analyzed at the hospital laboratory. Interviews were conducted by the principle investigator to assess knowledge, distribution and complications by self-reporting. Approval was obtained from the Research and Ethics Committee at the Ministry of health, South- Sudan. Data was analyzed using SPSS software program.

Results: The study reported a prevalence of 9%, seen high in males (11.6%) than females (2.5%) and more prominent among the Bari and Dinka tribes. Knowledge was rated poor among respondents.. Clinical history by self-reporting revealed 14.25% had severe pain, 20% had severe anemia, 55.6% had bloody urine, and 40.4% with urinary tract infection and 71.4% had abdominal pain at high altitude.

Conclusion: The study outcome gave a hint on the perception of South Sudanese of sickle cell. This calls for massive awareness to improve understanding of sickle cell and management of those with disease or trait. Screening programs can be established to enable individuals know their sickle cell status.