# Sickle Cell Anemia in African Countries

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In Africa, over 60% of people with Sickle Cell Anemia have a chance to live a long, happy life. Every year, around 300,000 babies are born with serious hemoglobin abnormalities, with over 200,000 cases of Sickle Cell Anemia in Africa, (Grosse et al., 2011). Sickle Cell Anemia is a common hereditary illness caused by the inheritance of defective hemoglobin genes from both parents in a hemoglobin problem. Red blood cells are normally flexible and spherical, traveling freely through your blood arteries; but, in sickle cell anemia, red blood cells(RBCs) become hard and sticky, forming sickles or crescent moon shapes. The irregularly shaped cells can become caught in blood vessels, slowing or blocking blood and oxygen flow to various regions of the body. Although there is no cure for sickle cell anemia, there are many options for therapies that can ameliorate discomfort and help prevent subsequent complications. The genesis, pathophysiological mechanisms, clinical symptoms, complications, and diagnostics will be discussed in my work.

Tissue cells need a constant contribution of oxygen to operate. Hemoglobin in red blood cells absorbs oxygen from the lungs and transports it to all of the body's tissues. Normal hemoglobin-containing red blood cells are disk-shaped, allowing them to pass through big and small blood arteries to provide oxygen. When a person develops sickle cell anemia, the RBCs might form hard rods within them, forming a crescent or sickle shape. Because sickle-shaped cells are rigid, they can adhere to vascular endothelium, creating an obstruction that slows or stops blood flow.

There is a low or no delivery of oxygen to the cells when the artery walls become clogged. The majority of patients with sickle cell anemia in the United States are of African origin or identify as black. Sickle cell trait affects about 1 in every 13 African American infants as well as 1 in 365 black children. Many persons with this condition are Hispanics, southern