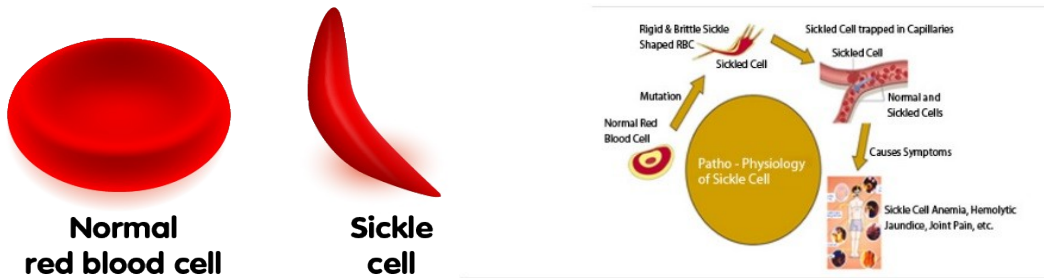


SICKLE CELL BROCHURE

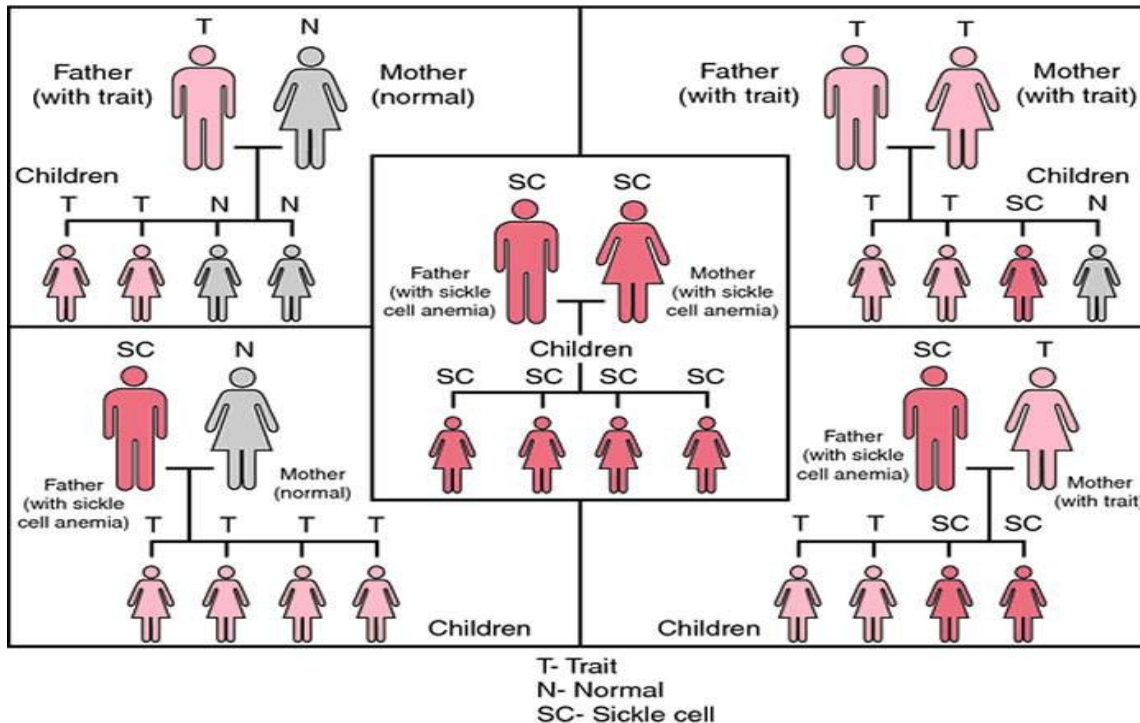
SICKLE CELL DISEASE



According to CDC,

- ❖ Sickle cell disease (SCD) is a group of inherited red blood cell disorders.
- ❖ Healthy red blood cells are round and SCD C-shaped farm tool called a “sickle”.
- ❖ Red blood cells move through small blood vessels carrying oxygen to all parts of the body.
- ❖ the red blood cells become hard and sticky with sickle cell
- ❖ Sickle cells die early, which causes a constant shortage of red blood cells.
- ❖ Sickle cells can get stuck in small blood vessels and block the flow of blood and oxygen to organs in the body.
- ❖ These blockages cause repeated episodes of severe pain, organ damage, serious infections, or even stroke.

TYPES OF SICKLE CELL



SICKLE CELL TRAIT (SCT)

- ❖ People who have inherit one sickle cell gene (“S”) from one parent and one normal gene (“A”) from the other parent.
- ❖ People with SCT usually do not have any of the signs of the disease and live a normal life.
- ❖ They can pass the trait on to their children.
- ❖ Few uncommon health problems that may potentially be related to sickle cell trait.

HbAS (SCT) : Parent A + Parent S = Baby AS

HbSS (*sickle cell anemia*): Parent S + Parent S = Baby SS

HbSC (*milder form of SCD*); Parent S + Parent C = Baby SC

HbS beta thalassemia: Parent S + Parent beta thalassemia (“O” and “+.”) = Baby S beta thalassemia

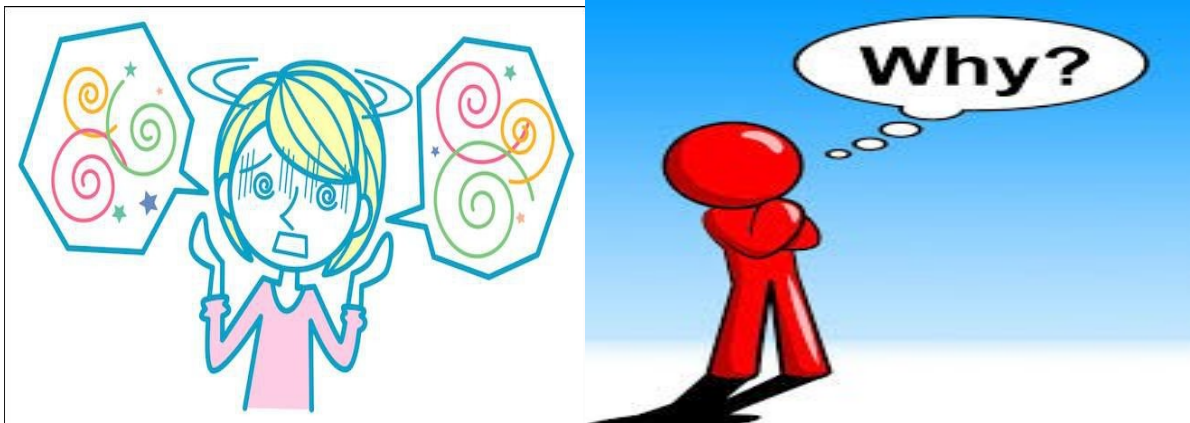
HbSD : Parent S + Parent D = Baby SD

HbSE : Parent S + Parent E = Baby SE

HbSO : Parent S + Parent O = Baby SO

Those with HbS beta 0-thalassemia usually have a severe form of SCD. People with HbS beta +-thHbSD, HbSE, and HbSO. People who have these forms of SCD inherit one sickle cell gene (“S”) and one gene from an abnormal type of hemoglobin (“D”, “E”, or “O”). Hemoglobin is a protein that allows red blood cells to carry oxygen to all parts of the body. The severity of these rarer types of SCD varies. alassemia tend to have a milder form of SCD.

CAUSES OF SICKLE CELL DISEASE



- ❖ It is an inherited disease.
- ❖ SCD is recessive
- ❖ Not contagious.

WHO IS AFFECTED?



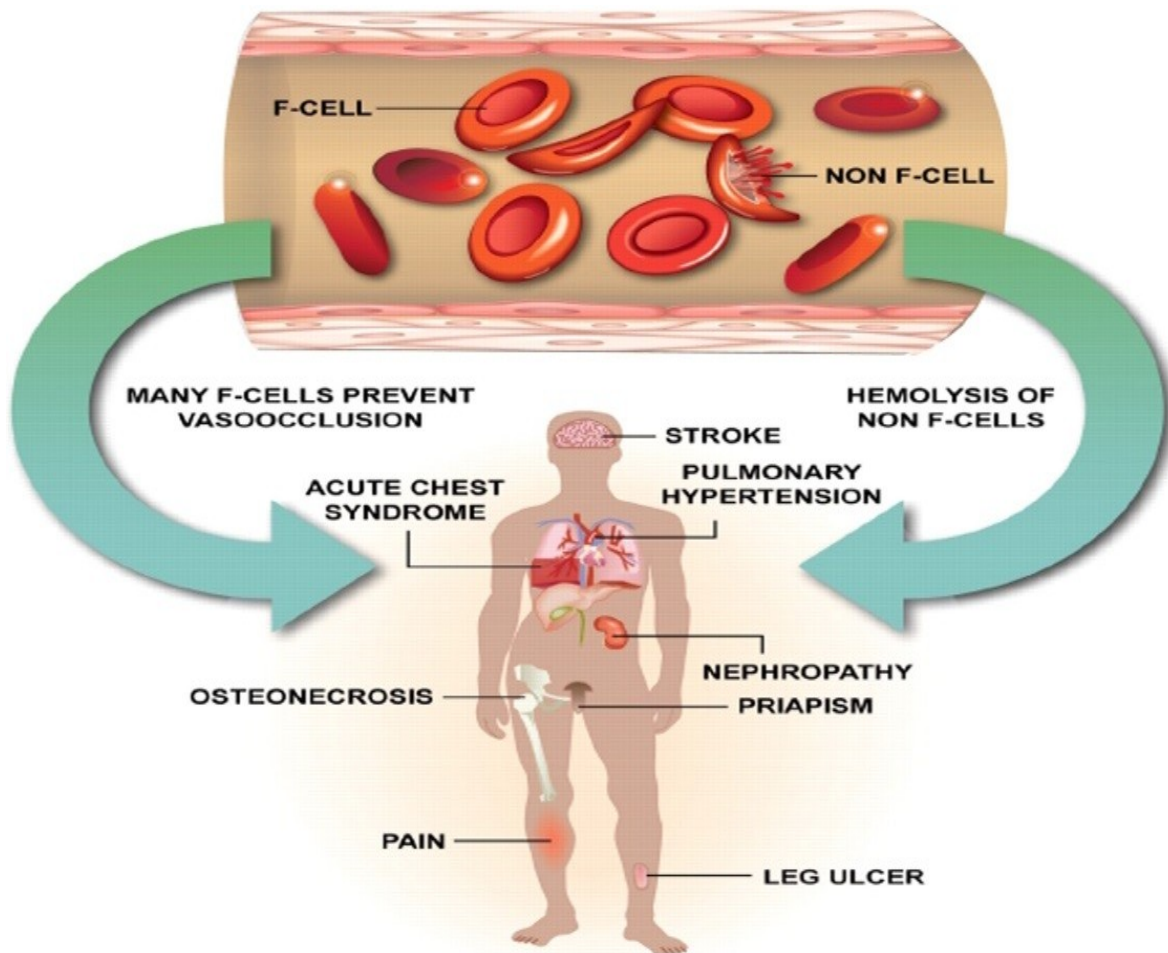
- ❖ Millions of people

DO I HAVE SICKLE CELL?



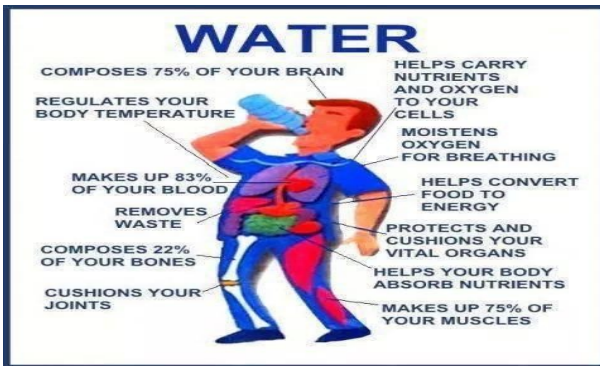
- ❖ DIAGNOSIS
- ❖ Blood Test
- ❖ Before or After Birth

SICKLE CELL RELATED PROBLEM



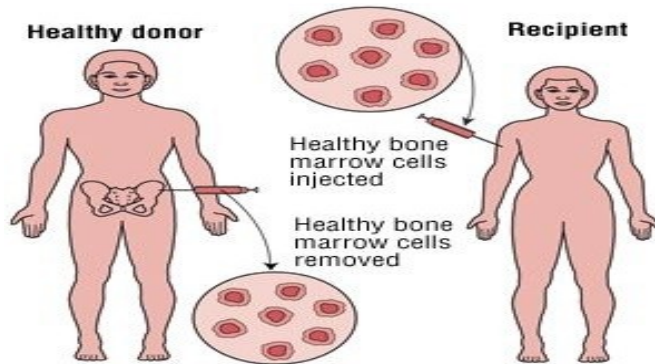
- ❖ Pain Crisis.
- ❖ Infection
- ❖ Hand and Foot swelling.
- ❖ Eye disease
- ❖ Acute Chest Syndrome.
- ❖ Stroke

TREATMENT OF SICKLE CELL



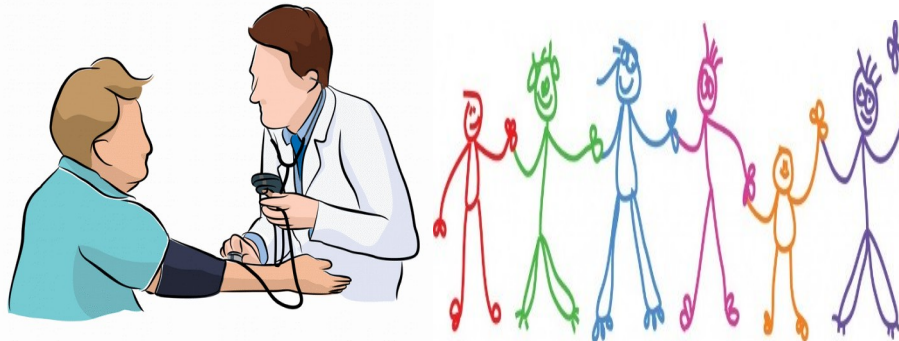
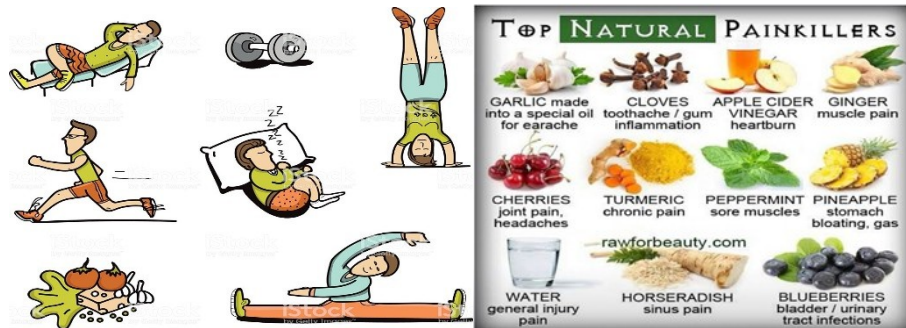
- ❖ Blood Transfusion
- ❖ High Fluid intake
- ❖ Intravenous (IV) therapy.
- ❖ Pain Medication
- ❖ Hydroxyurea

CURE FOR SICKEL CELL DISEASE



- ❖ Bone Marrow or Stem Transplant.

LIVING WITH SICKLE CELL



- ❖ Good Medical Care (Specialist)
- ❖ Regular Checkups
- ❖ Prevent Infection
- ❖ Healthy Habits
- ❖ Support

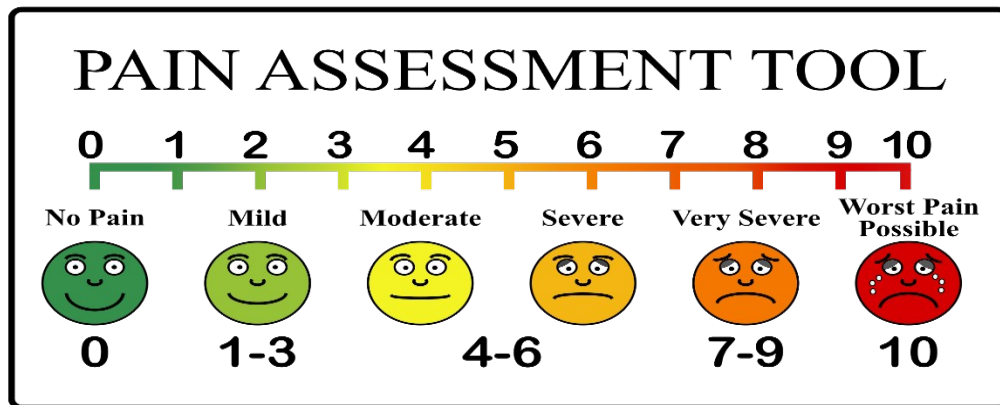
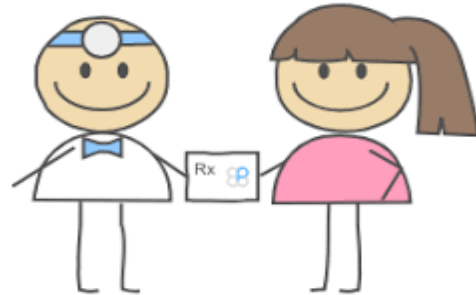
INFECTION PREVENTION



- ❖ Vaccines
- ❖ Hand Washing

❖ Food Safety

WHEN TO SEE A DOCTOR



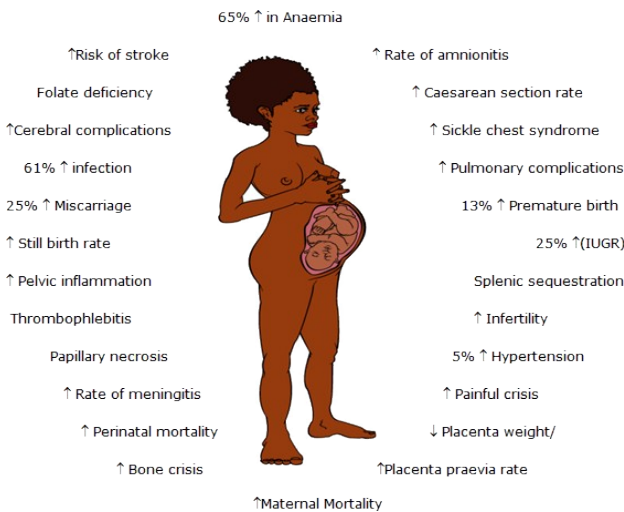
- ❖ Pain anywhere in the body that will not go away with treatment at home
- ❖ Any sudden problem with vision
- ❖ Fever above 101° F
- ❖ Difficulty breathing
- ❖ Chest pain
- ❖ Abdominal (belly) swelling
- ❖ Severe headache
- ❖ Sudden weakness or loss of feeling and movement
- ❖ Seizure
- ❖ Painful erection of the penis that lasts more than 4 hours

SICKLE CELL AND EXERCISING



- ❖ Walking.
- ❖ Dance
- ❖ Swimming / Water aerobics (heated).
- ❖ Yoga
- ❖ All Non Competitive Sports
- ❖ Cycling
- ❖ Stretching

SICKLE CELL AND PREGNANCY



Control Sickle Cell Disease before Pregnancy

GOAL: Decrease the frequency of SCD crises and improve fertility

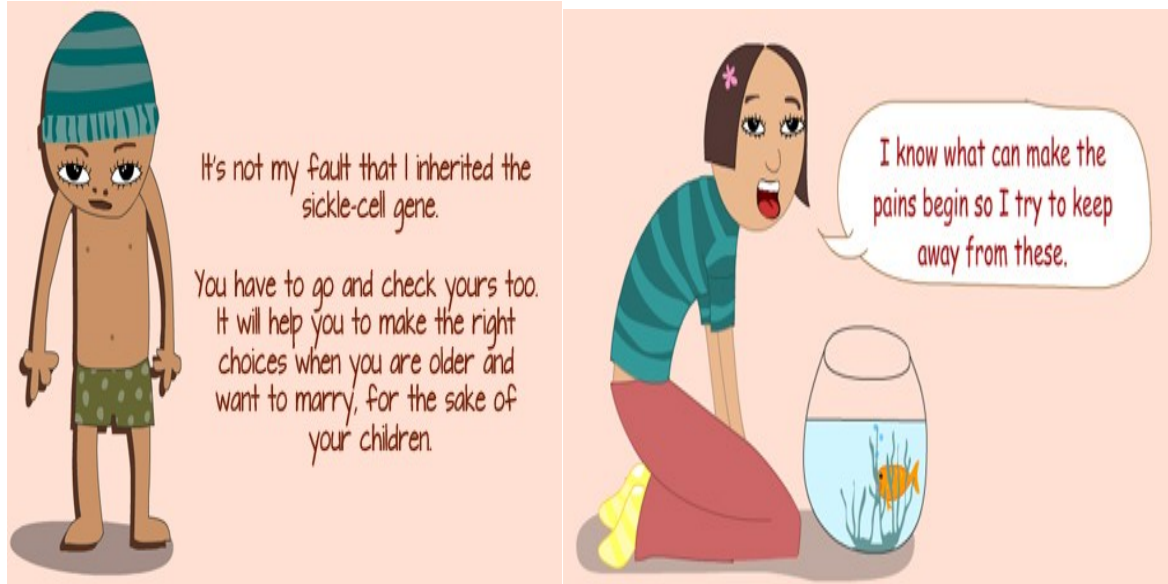
- **Diet:** to resolve nutritional deficiencies and improve menstruation
- **Low-impact Exercise:** to manage SCD pain and boost fertility
- **Prenatal Vitamins:** to increase fertility and prevent complications
- **Supplements:** to balance hormones and regulate menstruation
- **Good Habits:** undergo genetic counseling to learn about the risks

SheCares

- ❖ Frequent severe, and pain episodes
- ❖ Preterm labor,
- ❖ Having a low birth weight baby
- ❖ Other complications

- ❖ Needs during Pregnancy
- ❖ Early prenatal care and
- ❖ Careful monitoring throughout pregnancy.

SICKLE CELL PREVENTION



- ❖ Get Tested Before Marriage.
- ❖ Education