Introduction
Glucose-6-phosphate-dehydrogenase deficiency (G6PDd) is an X-linked hereditary genetic effect that has been estimated to affect 400 million people worldwide. This deficiency is associated with hemolytic disorders depending on the molecular variants and exposure to hemolytic triggers such as anti-malarial drugs like Primaquine and foods such as fava beans. Symptoms can go asymptomatic unless triggered by oxidative stress. Transfusion of blood with this deficiency may result in complications including neonatal jaundice.

Methods
Methaemoglobin reduction test (MRT) was used to determine the occurrence of G6PDd in blood donors at the regional blood transfusion centre (RBTC)-Mombasa. Samples were collected from the centre, transported to the laboratory and analyzed to observe the activity of G6PD.

Blood samples that took the brown color had defective G6PD activity and normal blood with normal levels took the red color of the lysed blood. Those that did not match the brown or red color were referred to as intermediates.

Conclusion
- G6PDd exists among healthy donors as either variants with slightly less than normal activity to those with very diminished activity.
- There is a higher probability that a blood group “A” person is more likely to have G6PDd in comparison to other ABO blood types.
- G6PD deficient individuals will not necessarily have a low haemoglobin level. 

References

Impact/moving forward
- Donors should be screened before donating blood
- Further studies should be done on G6PD deficiency

Acknowledgement