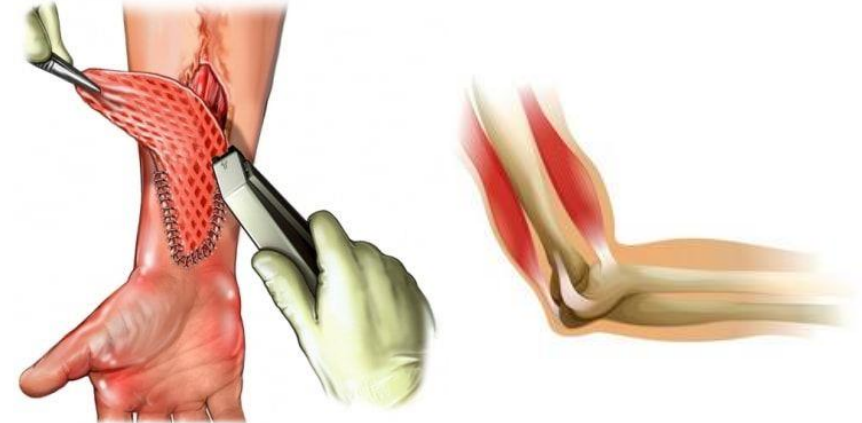


A survey of tissue banking activities on the African continent



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Introduction

- Tissue transplantation is used to improve the quality of life of millions of individuals
- Defining the need
 - There is no registry for tissue use in South Africa and the continent
 - Difficult to accurately determine the size of the market
 - Demand > supply
- Tissue banking activities have been increasing globally but have reached a plateau in South Africa (and on the continent?)

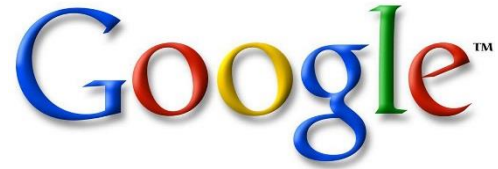
Introduction

- Human tissue definition
 - National Health Act (no. 61 of 2003)
 - human tissue, and includes flesh, bone, a gland, an organ, skin, bone marrow or body fluid, but excludes blood or a gamete
 - Regulations relating to tissue banks (No. R. 182)
 - a functional group of cells. The term is used collectively in Regulations to indicate both cells and tissue
- Human tissue can be recovered from both deceased and **living** donors
- Human tissues and cells that can be donated include:
 - Heart valves, **stem cells**, cornea & sclera, **amnion**, **blood & blood related products**, skin, **gametes**, bone & tendon, **bone marrow**, **femoral heads**, **cord blood & tissue**

Problem statement and aim

- Problem statement
 - There is limited knowledge about tissue-banking activities on the African continent
- Aim
 - To document tissue-banking activities currently taking place on the African continent

Methods



Read through
articles

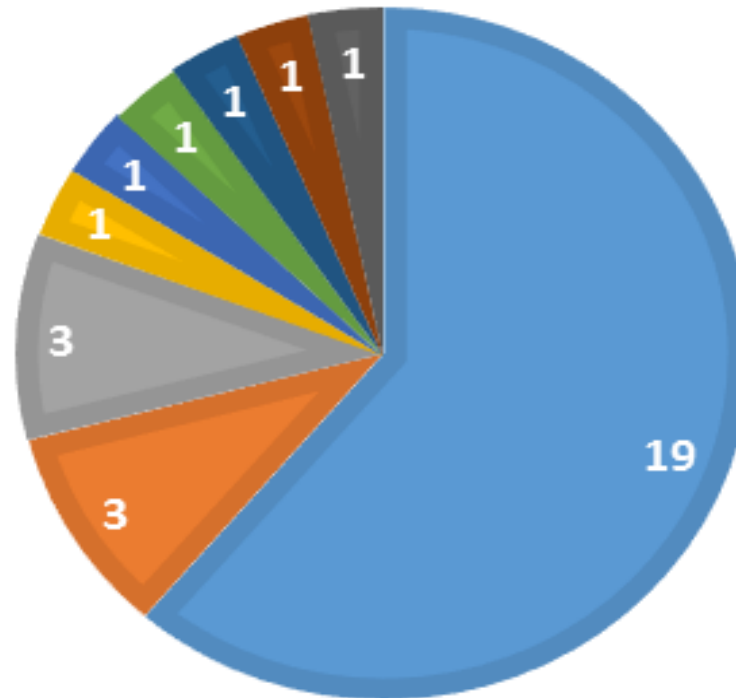
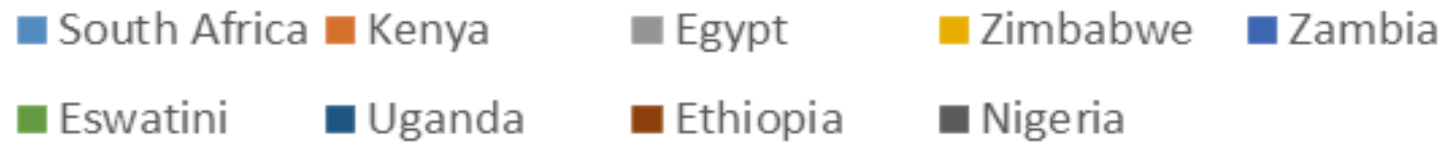
Reached out to
contacts

A list of tissue banks was compiled

- Name of the organisation
- Country in which it is based
- Relevant tissue stored
 - Contact details

Results & Discussion

TISSUE BANKS IN AFRICA





Tissue banks in South Africa

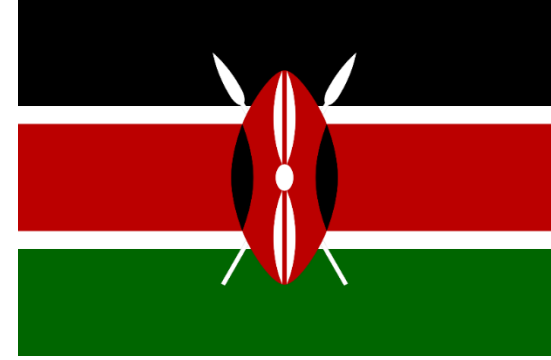
- Multi-tissues (2)
 - Centre for Tissue Engineering & Next Biosciences
- Stem cells (2)
 - Cryo-save & reDermis
- Gametes (9)
 - Eggs: VEDA Egg Donation Agency
 - Sperm: Androcryos - Androlody Lab and Sperm Bank, Cape Cryo Bank
 - Both: Aevitas Fertility Clinic, Pretoria Fertility Centre, BioART Fertility Clinic, Vitalab, Medfem Fertility Clinic & Gynomed



Tissue banks in South Africa cont.

- Cornea & sclera (3)
 - Eye Bank Foundation of South Africa, KZN Cornea and Eye Association & Gauteng Cornea and Eye bank
- Blood & blood products (2)
 - Western Cape Blood Service & South African National Blood Service (SANBS)
- Heart valve homograft (1)
 - Homograft bank (UFS-Tissue Lab)

Tissue banks in Kenya



- Stem cells, whole cord blood & cord tissue
 - Cells4Life (Asterisk Limited)
- Whole cord blood & cord tissue
 - Netcells
- Blood
 - Kenya National Blood Transfusion Service (KNBTS)



Tissue banks in Egypt

- Umbilical cord blood stem cell, umbilical cord tissue, placental tissue and the amniotic membrane tissue, dental pulp & adult
 - Cell Safe Cord Blood Bank
- Whole cord blood and cord tissue
 - Cells4Life
- Blood & blood products
 - Egyptian Red Crescent Blood Bank (Cairo, Qena, Alexandria, Al-Gharbia & Al-Beheira)

Other African countries

- Nigeria
 - Corneas: The eye bank for restoring sight
- Eswatini
 - Blood & blood products: Eswatini National Blood Transfusion Services
- Zambia
 - Blood & blood products: University Teaching Hospital (UTH) Blood Bank



Other African countries

- Ethiopia
 - Cornea: Eye Bank of Ethiopia
- Uganda
 - Blood & blood products: Uganda Red Cross Nakasero Blood Bank
- Zimbabwe
 - Blood & blood products: National Blood Service Zimbabwe



Conclusion

- Information on the existence and nature of African tissue banks are often incomplete
 - Lack of websites or any other online information
 - Number of tissue banks in Africa might be more than the 31 documented here
- There is a need for additional tissue banks on the African continent
- Any clarification or further information would be most welcome

Acknowledgements

- Marisa Henson (General Secretary of WUTBA)
- Heather Machin (Global Alliance of Eye Bank Associations)
- Charlotte Ingram (South African Bone Marrow Registry)

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Thank you