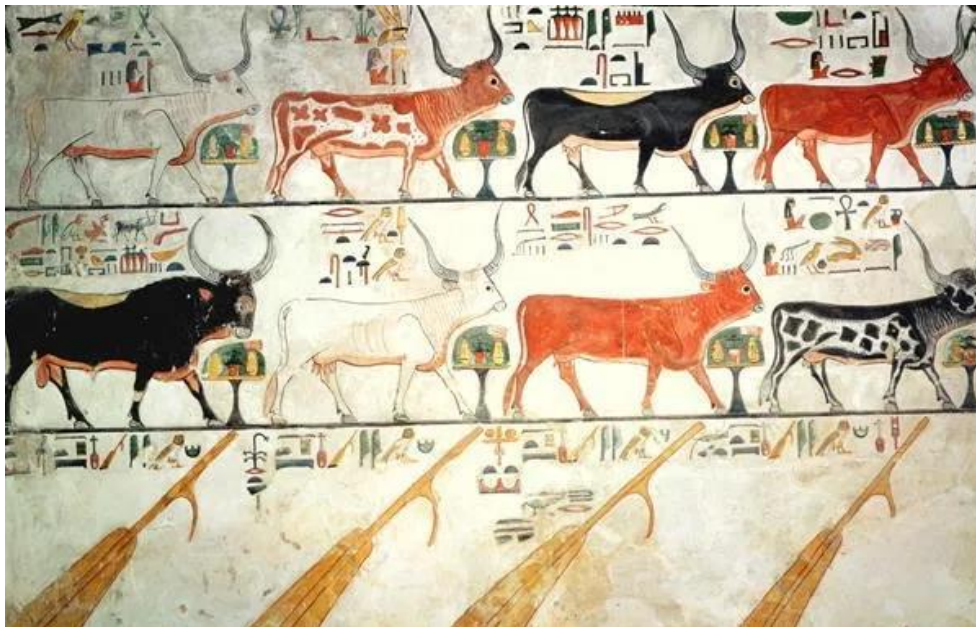


# Ancient Veterinary Practices in Africa and Contextual Relevance in Primary Animal Health Care



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# Human-Animal Interaction

- Historically, a major shift from nomadic life to settled existence had a tremendous effect on human-animal relationship;
- HAI has always been complex and influenced by how humans perceive animals
  - Animistic view (animals and plants have a soul/spirit)
  - Anthropocentric view (animals exist for the benefit of humans)
- Human-Animal Interaction (HAI) has laid a foundation for veterinary care/medicine

# HAI in History

- Between **13,000 and 2,500 BC** humans domesticated dogs, cats, cattle, goats, horses, and sheep from their wild counterparts; and this developed a human-animal bond;
- Human-animal bond is a mutually beneficial and dynamic relationship between people and animals that is essential to the health and well-being of both. (Melvin, 2021)
- It is believed that veterinary medicines was practised long before written records could be made (Mark, 2020)

# Historical Perspectives

Joshua J. Mark, Author of "*Brief History of Veterinary Medicine*" 2020,  
argues that :

**GREEK & ROMAN WRITERS**

**OFTEN REFERRED TO AS THE "*FATHERS OF  
VETERINARY MEDICINE*" ONLY CONTRIBUTED TO  
WHAT HAD ALREADY BEEN ESTABLISHED.**

# Historical Perspectives

- It is further argued that, the rough evolution of veterinary practice dates back to ancient civilizations in **Mesopotamia**, **Africa**, **China** and **India**;
- This is believed to be long before it arrived in **Greece** and **Rome** where it was later developed throughout Europe (Mark, 2020);
- Physicians of other regions were practicing veterinary medicine long before the written records could attest to it.

# Early Roots of Veterinary Medicine

- **4,000 – 3,000 BC**: medical treatment of animals became more common in **Egypt** and eventually got codified;
- Some scholars, in fact, have argued that veterinary practice in **Egypt is among the earliest in the world** dating back at least to the time of the Old Kingdom (c. 2613-2181 BC) if not earlier (*Conni Lord, 2015*)

# Early Roots of Veterinary Medicine

- In **1889**, archaeologists discovered fragments of an ancient veterinary medical textbook made of **papyrus**.
  - text covered diseases relating to birds, cattle, dogs, and fish
  - Horses & cattle were the primary focus as they were economically important for transportation, agriculture, and trade in early Egyptian society
  - Gynecological practices by cattle attendants and “The Overseer of Animals” – pulling calves

# Egyptian ancient veterinary medicine

- The Kahun Papyri – known to be the earliest record of veterinary medicine in the world (Egyptian texts dated to **1825 BC**);
- Found at Lahun (Egypt) by Flinders Petrie in 1889 AD, are kept University College London;
- One of the largest collection of papyri ever found;



Source: [Worldhistory.org](https://www.worldhistory.org)



## Extract translated from Kahun Papyri:

*Treatment for the eyes (?) of a bull with the wind (cold ?)*  
*If I see [a bull with] wind, he is with his eyes running, his forehead*  
*?uden (wrinkled ?) the roots (gums ?) of his teeth red, his neck swollen*  
*(or raised ?): repeat the incantation for him. **Let him be laid on his side,***  
***let him be sprinkled with cold water,** let his eyes and his hoofs (?) and*  
*all his body be rubbed with gourds (?) or khenesh plants, let him be*  
*fumigated with gourds ..... wait herdsman ..... be soaked .....  
that it draws in soaking ..... until it dissolves into water: let him be*  
*rubbed with gourds of cucumbers. Thou shalt gash (?) him upon his*  
*nose and his tail, thou shalt say as to it, "he that has a cut either dies*  
*with it or lives with it." If he does not recover and he is wrinkled (?)*  
*under thy fingers, and blinks (?) **his eyes, thou shalt bandage his eyes***  
*with linen lighted with fire to stop the running.*

# Indigenous Knowledge Systems in Veterinary Medicine

**DO THEY HAVE A SPACE  
IN THE SCIENTIFIC  
WORLD?**

# Indigenous Knowledge Systems in Veterinary Medicine

- According to WHO, **at least 80%** of people in developing countries depend largely on indigenous practices for the treatment and control of various diseases in both humans and animals
- Livestock keepers relied on these traditional practices before introduction of Western medicines
- Centuries of local people's empirical observation and experience (*McCorkle and Mathias-Mundy, 1992*)
- Millions of people have an intimate relationship with their livestock (*Menegesha, 2020*)

# Role of Indigenous Knowledge Systems in Veterinary Medicine

- Winning growing attention and respect within conventional science and the international arena.
- Most are ecologically friendly and inexpensive
- Evidence based on historical use was the mostly used criterion to determine efficacy and safety



# IKS and Modern Veterinary Practices

- Veterinary regulations may often be perceived to be autocratic and non-consultative (*Mwatwara, 2014*)
- Veterinary regulations and modern practices may be seen to be impractical to implement in communal areas e.g. Brucellosis Control Scheme (*Kgasi, 2019 unpublished findings*)
- Practices often perceived to be Euro-centric and not recognizing the role of African veterinary practices

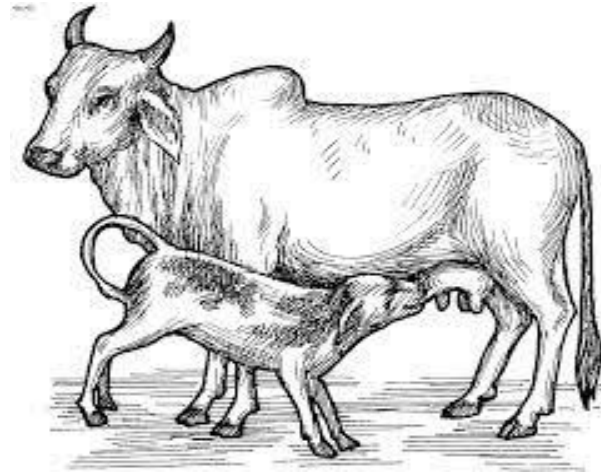
# Access to African Veterinary Practices Information

- Practices may not have been documented
- Historical documented literature about practices have emanated during colonial areas reflecting an 'outsiders' perspective, often riddled with prejudice and condemnation
- Information available may not reflect popular thinking among Africans due to colonial officials' inability to penetrate local culture (*Mwatwara, 2014*)

In **1927**, **Eric Nobbs**, the **Director of Agriculture in Southern Rhodesia**, reported that:

*The Mashona possess an intimate knowledge of the medicinal virtues of herbs, root and bark, and use these for their cattle.*

*Generally speaking, these drugs are similar in action to corresponding materials known to us, and in use are in more convenient form whether it be as purgatives, laxatives, diuretics, emollients, as stringers and so on.*



# Ethno-veterinary Medicine

- Farmers in African societies had through lived-experience and observation over a long period of time, became acquainted with the veterinary diseases prevalent in their areas and herbal remedies to treat them (*Dr. Dexter Chavunduka's ethnographic study*)
- Africans may not have had the same scientific explanations as to how these remedies work diseases, **but**
- Scientific analysis has demonstrated that some of these were of pharmacological value.



# Some examples of Ethno-veterinary Medicines used

- The reproductive performance was improved through the use of certain herbs
- Milk production was increased by drenching cows with an extract from the Vlei lily (*crinum macowanii*) whose roots were pounded and the juice smeared on the cows' teats.
- The Aloe plant (*aloe barbadensis*) used as co-therapy for Newcastle disease in chickens.
- The mumwahuku plant's leaves (*cassia didymobotrya*) for treat chickens from being a chitosi (Coccidiosis).
- *Clausena anisata* (muvengahonye) leave oil – treat maggots in wounds

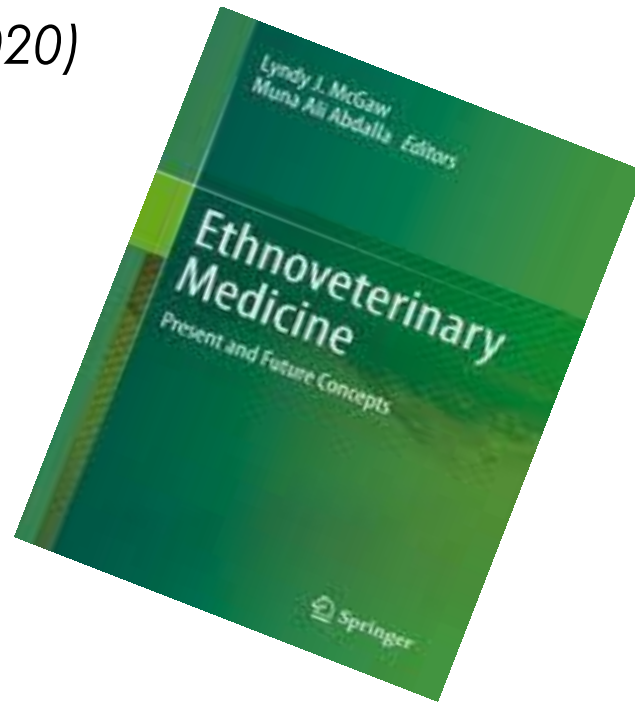
# Societal benefits of recognizing IKS

- Acceptance and recognition people's identity – socio-culturally embrace
- Co-existence with “modern scientific methods”
- Removes “Only-the-West-is-Best” mentality
- Significant part of practices are environmentally friendly
- May assist in modern challenges of microbial drug resistance



# Ethno-Veterinary Medicine Advances in South Africa

- In the past decade, ethno-veterinary surveys conducted in South Africa report the use of **139 plants** from **50 families** used against **21 animal diseases** and conditions. Leaves, roots and bark have remained popular plant parts used for EVM  
(McGaw *et al*, 2020)



# THANK YOU

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