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CULTURAL AND ETHNO-MEDICINAL UTILIZATION OF SELECTED WILDLIFE SPECIES IN UMUAHIA, ABIA STATE, NIGERIA

[1]Mustafa, M.O., [2]Adetunji, A.S., [1]Ezekwe, C.O., [1]Ovuike, O.O. and [3]Muili, A.G

[1]Forestry Research Institute of Nigeria, Humid Forest Research Station, Umuahia, Abia State
[2]Forestry Research Institute of Nigeria, Rain Forest Research Station, Ore, Ondo State
[3]Federal Inland Revenue Service, Umuahia Office, Abia State
Corresponding Author's email:mustafamusiliyu@yahoo.com

Abstract
Wild animals have been integral parts of people's psyche, art and culture from the past. Wildlife use in various medicinal preparations as element of people's cultural practices is also dated to untraceable past. Wildlife irrespective of their evolutionary category has therefore undergone varying degrees of utilization in disease and ailment treatment among local populace in Africa. The need to document these animals as indices of ethno-medicine is hence imperative as a guide to determine the impact of their use on biodiversity abundance and distribution. This article reviews the involvement of common wild animals with their parts and products in traditional medicine within Umuahia and the suburbs in Abia State, Nigeria. Results revealed more males than females, majorly within 51 to 60 years of age, prevalence of elementary education and married men and women were among the stakeholders interviewed. Documentation of wild animals and their parts with products in native medicine within the study area showed that mammals were the most serviceable in trado-medicinal practices, followed by reptiles, birds and invertebrates/products in decreasing order. Appropriate recommendations of intensified government awareness campaigns to educate the members of the public, especially wildlife stakeholders on conservation status of key wildlife species, establishment of more forest reserves and others were made.

Keywords: Wildlife, ethno-medicine, culture, and utilization

Introduction

Culture describes the cumulative deposit of knowledge, experience, beliefs, values, attitudes, meanings, hierarchies, religion, notions of time, roles, special relations and possessions acquired by a group of people from generation to generation (Li and Karakowsky, 2001). It also summarizes the way of wife, especially the general customs and beliefs of a particular group of people at a particular time (CUP, 2019). Loss of traditional knowledge has impacted on the development of modern medicine, it is therefore important to document the traditional knowledge of human communities, since the majority of such communities are losing their socioeconomic and cultural characteristics (Yirga *et al.,* 2011; Soewu, 2013). The science of ethno-zoology however deals with the management, classification and use of animal species, both wild and domestic for human healing and rituals or sacrifices with magical purposes (Lawal and Banjo, 2007). It plays a role in healing practices within Mozambican society because the use of animal products for healing purposes is an ancient practice complimentary to the body of knowledge in plant-based medicines(Williams *et al.,* 2016).

Zootherapy as the name suggests, is the healing of human ailments by using therapeutics obtained from animals according to Yirga *et al.,* (2011). Varts (2015) also observed zootherapy as medicinal use of animals and their derived products. The local people have learnt over the millennia how to identify plants and animals for various purposes as they have to rely upon the vegetation and existence of animals for their food, medicine and other necessities of life (Lawal and Banjo, 2007). Wild animals and their products constitute the essential ingredients in traditional medicine (Soewu, 2008; 2013) and have been in existence in African urban and rural communities prior to introduction of cosmopolitan medicine by Europeans (Ali, 2011). There is an increasing demand for wild animals and their parts for ethno medicinal use, hence the need to document the extent of utilization of these animals and their parts/products is imperative because their utilization is a measure of impact on biodiversity (Soewu, 2008). This paper assembles common wildlife species in Umuahia and the environs with different medicinal, spiritual,

ceremonial, cultural and decorative uses.

Materials and Methods

The assessment was done in Umuahia, Abia State located on Lat 5.52^0N, Long 7.49^0E and 148 metres above sea level (World Atlas, 2015). Eight Local Government Areas (and five respondents from each) were selected for the study using Systematic Random Sampling (even method). In each Local Government Area, Professional Associations were interviewed face-to-face (Jang, 2016) to elicit information using structured questionnaire and filled by the researcher on the various traditional and ethno-medicinal uses of common wildlife species in their surroundings. This method brought the number of respondents to 10 in each Local Government Area and 80 in the study area. Data generated were described by use of descriptive statistics.

Results and Discussion

Demographic Characteristics

Occupational distribution of respondents revealed that they were basically farmers (2), traders (10) and herbalists (2) (Table 1). Age distribution of respondents is shown in Table 2. The practice of ethno-medicine is meant for adults and most popular among people from ages of 41 to 50 years and above. This is probably due to the indigenous knowledge associated with the enterprise which must be kept secret. This agrees with Dedeke *et al.* (2006) that respondents in ethno-medicinal trade in Southwest Nigeria mostly belong to the age group of 34-45 years and above. Educational profile of stakeholders in ethno-medicinal practice showed that higher educational qualification is not a pre-requisite for the business (Table 3). Community leaders attained mostly secondary and tertiary education probably due to the civilization, knowledge and wisdom acquired from schools and which are needed for leadership. This result agreed with Lameed and Sanni (2011) that ethno-medicine features little or elementary education among respondents. Table 4 shows the marital status of the members of cultural and ethno-medicinal communities in Umuahia and the environs. The enterprise was not meant for singles but for married men and women. The implication of this situation is that ethno-medicinal vocations are sustaining jobs because the members are able to cater for their family members through the trades and hobbies; community leaders were all married. This result was in consonance with Lamed and Sanni (*ibid*) that stakeholders in wildlife markets were mostly married. Ethno-medicinal use of wildlife species and products from invertebrate wild animals were mostly involved in medicinal preparations and antidotes. Birds were mostly engaged in spiritual activities probably due to their elusive nature in the physical realm. Reptiles in Umuahia and environs were more engaged for spiritual, medicinal, decorative, leather purposes than birds. Antidotes and pain relievers were made from reptiles' teeth and fat respectively in the study area. Reptiles were more involved than birds and invertebrates in the study area for ethno-medicinal uses probably due to human higher access to reptiles than birds and bees on the basis of high mobility (Table 5). Mammals were the most abundantly engaged in ethno-medicinal use in Umuahia and the suburbs; this might be due to their evolutionary closeness to humans implying related body physiologies (Table 6). The situation might also be accounted for by human increased access to mammals due to their higher abundance on land. They were involved in a myriad of uses like antidotes, decorative purposes, spiritual, lethal uses, condiment, medicinal, anti-inflammatory drugs and others due to different products like fats, flesh, blood and milk from them (Muhhammad and Arshad,2017).

Table 1: Occupational Distribution of Respondents

	Comm. Leaders	Farmers	Ethno-medicinal Traders	Hunters	Herbalists
Obs	0	2	10	0	2

Source: Field survey, (2019)

Table 2: Age Distribution of Respondents

Age	Community Leaders	Farmers	Ethno. Traders	Hunters	Herbalists
21-30	0	0	0	0	0
31-40	0	4	2	0	0
41-50	0	4	4	8	4
51-60	6	6	6	8	4
60 >	10	2	4	0	8

Source: Field survey, (2019)

Table 3: Educational Profile of Respondents

	Community Leaders	Farmers	Ethno-medicinal Traders	Hunters	Herbalists
N.F	0	6	4	4	6
Elementary	4	6	8	8	8
Secondary	8	4	4	4	2
Tertiary	4	0	0	0	0

Source: Field survey, (2019)

Table 4: Marital Status of Respondents

	Comm. Leaders	Farmers	Ethnomedicinal Traders	Hunters	Herbalists
Single	0	0	0	0	0
Married	16	14	16	14	16
Widowed	0	2	0	2	0
Divorced	0	0	0	0	0

Source: Field survey, (2019)

Table 5: Invertebrates (I), Birds (B) and Reptiles (R)

Species	Umuahia North L.G.A	Umuahia South L.G.A
***Achachatina marginata*(I)**	-	1. Fluid to treat high blood pressure 2. Fluid with honey as cough remedy
***Achatina achatina*(I)**	-	1. Fluid used to prepare cough remedy 2. Fluid to cook herbs as snake antidote
***Chen Caerulescens* (B)**	-	1.To appease witches 2. Head as protection against witchcraft for fortune also
***Francolinus bicalcaratus* (B)**	1. Eggs for incantation and libation for offerings at footpath junctions to heal the sick 2. Medicine for hunters to hunt/catch plenty	Pepper soup requirement to sustain pregnant women
***Numida meleagris* (B)**	Head and intestines for medicine against appendicitis and hearing	Fortune / luck medicine
***Grocodilus amphibius* (R)**	1. kin for making knife and sword pouch 2. crocodile scales for swimmers against drowning	Witches appeasement
***Groyia smithii*(R)**	Ancestral protection on indigenes	1. Medicine to treat throat infection 2. Treat bone pains 3. Symbols of fore-fathers' presence and support
***Gastropyxis samaragdina* (R)**	Teeth for antidote	Head to make witches Appeasement
***Python regius* (R)**	1.Fat to heal wound blisters and scars after healing 2. Meat and antidote against food poisoning	1. Head and fat to appease witches 2. Skin for shoes and bag 3. It bites wicked people automatically
***Naja nigricolis* (R)**	Teeth antidote for snake bites	1.Fat to treat rheumatism 2. Head for medicine against witches
***Bits arietans* (R)**	Teeth antidote for snake bites	As a spy and soothsayer
***Kinixys erosa* (R)**	-	Demobiliser used by thieves when stealing at Night
***Veranus mambitean* (R)**	1.Shells for plate to carry sacrifice to junctions 2. Shells for bullet and knife resistance 3.Making monitoring mirror among witches and ritualists	-

Key: Invertebrates (I), Birds (B) and Reptiles (R)
Source: Field survey, (2019)

Table 6: Mammals

	Umuahia North	Umuahia South
***Manis gigantean* (M)**	Scales are roasted to make African salad or soup condiment Guide / weapon for witches in the night	Witch appeasement
***Genetta genetta* (M)**	Skin for charms to cause disappearance among human beings	Claws wound human parts in the night
***Felis libyca* (M)**	Anus as medicine and medicine for menstrual disorders. Whiskers as food poison	Skin and tail for Skin for charms to kidnap/disappear human beings
***Civectitis civetta* (M)**	-	1. Skin for shoes and bags. 2.Feaces for witch appeasement
***Dendrohyrax dorsalis* (M)**	1.Skull hung on the neck against epilepsy 2.Teeth boiled in water, a snake bite victim drinks all as antidote	Skull hung on the neck against epilepsy
***Dendrohyrax dorsalis* (M)**	Skull for medicine against convulsion among children. Hanging the skull on neck for convulsion patient as remedies.	-
***Herpestis sanguineus* (M)**	1. Skull for medicine against convulsion among children. 1. Hanging the skull on neck for convulsion patient as remedies.	-
***Colobus guereza* (M)**	Skin and fingernails for medicine to cure deafness	1. Skull to hang on neck of epilepsy patients. 1. Skull as medicinal tea for babies to work. 2. Teeth as medicine for baby good head shape.
***Erythrocebus patas* (M)**	Palms to protect palm wine tappers from failing. They are feigned by ritualists to kill in the night	1. Skull is hung on neck of epilepsy patients. 2. Teeth as medicine for babies' good head shape.
***Anomalurus beecroofti* (M)**	-	To appease witches (medicine)
***Epixerus ebii* (M)**	Medicine to overcome enemies	Medicine against epilepsy (skin, teeth, limbs)

Table 6 cont'd

***Xerus erythropus* (M)**	-	1.Medicine against epilepsy (skin, teeth, limbs) 2. Legs for sprinting competition success.
***Xerus erythropus* (M**	For women that just delivered, it is used to flush bad blood out of them.	1. Medicine to cure high blood pressure. 2.Medicine for rheumatism
***Lepus capensis* (M)**	-	Skin for shoes and drums
***Cricetomys gambianus*(M)**	1. Spines roasted and pounded to make African salad and condiment. Also, spines to decorate women's hairs. 2.Tails for medicine to stop miscarriage	Spines to weave decorate hairstyles
***Hystrix cristata* (M)**	1.Spines roasted and pounded to make African salad and condiment. 2.Spines to decorate women's hairs	-
Phargochoerus africanus	Ritualists feign them to operate	Skin for shoes and drums
Cephalopus rufilatus	-	Skin for clothe decoration, chair decoration. Horn to make command
Hippotragus equineus	Bone legs for medicine against	Skin for decoration

	rheumatism	
***Tragelapus scripus* (M)**	Skin for decoration	-
***Apis mellifera* (I) (Product)**	Medicine for cough and sweetener. Bees as medicine for warriors for protection	1.Medicine for cough 2. Medicine for cough, Cream for skin smoothening. 3. To command bees during war and chase away rebels.

Key: I=Invertebrates, M= Mammals
Source: Field Survey (2019)

Conclusion

The use of the wildlife species, their parts and products is as old as humans in Umuahia and environs. More men are involved in sourcing of the wildlife than women probably due to the tedium attached to hunting and farming, also the knowledge and stress attached to herbalism. The jobs as sustaining ones require little education but high sense of maturity as demonstrated by married people. Mammalian species have more developed sense organs and human-related body physiology as evidenced by zoonotic diseases and on the basis of their ontogeny; they are more relative to human life than birds, reptiles and invertebrates. Mammals are therefore more involved in spiritual and medicinal uses for human utility than other groups in this study. Human beings having lived very close to nature have understood every wildlife species' ecology and can harvest them at will, including some that are on the verge of extinction. Government at all levels should educate stakeholders in cultural and ethno-medical opportunities on the need to avoid over harvesting knowledge on conservation status of key wildlife species in order to curtail them from going into extinction. More reserves should be created to achieve in-situ conservation objectives, school leavers and retirees should be exposed to animal domestication in order to guarantee their use in perpetuity.

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