SURVEY OF ETHNO-FAUNA RESOURCES IN NASARAWA STATE

Falade Luke Olawole

Department of Forestry, Wildlife and Ecotourism, Shabu-Lafia. Nasarawa State University, Keffi

Email: *flo_orb@yahoo.com* Ω:+234-8033716312, +234-8156357810

ABSTRACT: *Survey study was carried out on the existing ethnofauna resources in three different local government areas (Lafia, Nassarawa Eggon and Doma) in Nasarawa State to document various animals used in treatment of ailment in the study area. A total of sixty (60) respondents were used for the study, five markets were randomly selected from each of the local government area and four traditional medical practitioners from the selected markets were interviewed. Data collected were analyzed using simple descriptive statistics and Information Consensus Factor (ICF). This result shows that fauna based trado-medicinal preparation in various forms has wide acceptance among the people in the study area. This fauna species are often used in conjunction with one or more other animal and/or plant species, though there are some situation in which a single-species preparation is employed in treatment. Based on the result of the study it was recommended that animals species should be domesticated rather than wild hunting and more research should be conducted by Pharmaceutical companies to ascertain the efficacy of these animals in trado-medical practice.*

Key words: *Ethno-fauna, Trado-medical practitionals, fauna species, Resources,*

1.0 Introduction

Wild animals and their product constitute essential ingredient in the preparation of drugs in traditional medicine (Adeola, 1992). Though a wide range of animal products are used to treat variety of conditions, many wildlife product are also used for ceremonial and religious practices as well as fetishes. Indeed animal-based medicines have always played a significant role in healing practices, magic, rituals and religion of societies all over the world (Angelleti et. al, 1992).All human civilization with structured medicinal system would utilize animals as medicines (Dedeke et al., 2006). It has also been estimated that of the 252 essential chemicals selected by the World Health Organization, 8.7% came from animals (Dedeke et al., 2006).

Africa boasts along and valued tradition of using wild animal and plants for medicinal purposes. Traditional healing emerged in Africa long before the advent of orthodox, modern medicine and people depended largely on traditional medicine as their only Source of health care (Adeola, 1992). Traditional medicines as practiced today continues to live side by side with modern medicine actively in Nigeria where the traditional medical practitioner even made new discoveries, which have cured major ailments in the society. Such discoveries stem from the consistent efforts of traditional healers to eradicate dangerous diseases which have plagued the

society in recent times and which are apparently incurable through orthodox medicine, major diseases such as epilepsy, cancer, convulsion, paralysis, snake bite, mental illness, even other ailments having hereditary origins are now being cured by traditional medicine, (Odu, 1987).

With the introduction of orthodox medicine, proper documentation and valuation of these medicinal animals species are suffering setback and hence so many medicinal animals are under threats because the animal species which were supposed to be properly protected as a result of their medicinal value and of great importance to our fore fathers are being destroyed as a result of deforestation, hunting and indiscriminate bush burning, there is therefore need to carry out a survey of ethno-fauna resources in Nasarawa state and to document various animals used in treatment of ailment in the study areas within the state. Because some of these medicinal resources are being destroyed before their uses are being discovered and this is tantamount to traditional knowledge erosion as youths are not very keen at learning herbal practice nowadays. It is therefore important to conduct a survey on the existing medicinal resources as this will help in identifying threaten species and it's uses to enable appropriate conservation measure for the identified flora and fauna resources.

2.0 Methodology

2.1 Description of Study Areas

The study was conducted in three Local Government Areas of Nasarawa State. They include:

Lafia, Nassarawa Eggon and Doma LGAs. Lafia, Nassarawa Eggon and Doma LGAs have a population of 330,712, 149, 129 and 400,000 respectively (Census, 2006). Lafia, Local Governments is located between Latitude $70^{0}9`N$ and longitude $70^{o}9`E$, Nassarawa Eggon lies approximately between latitude 70^{o} and 90^{o} North and Longitude 70^{o} and 100^{o} East. Doma Local Government Area lies between latitude $08^{0}$and 33^{o} North and longitude 08^{0} and 82^{0} East and approximately 181.53 km above sea level (Jayeoba, O. J, 2013). The major ethnic groups in the areas are: Eggon, Hausa Fulani, Kanuri, Alago, Gwandara, Migili, Akye, Tiv and Rindere. Most of the dwellers in the study area are farmers which often grow crops like rice, yam, maize groundnut, cassava, soya bean, beni seed, sweet potato, millet, orange, Mangoes and Cashew.

2.2 Population, Sampling Procedure and Data collection

In each of the local government area, five markets were randomly selected and four traditional medical practitioners from each market were interviewed making a total of sixty (60) respondents for the study. The local markets for Lafia Local Government Area include; Assakio, Gidan Mai akuya, Adogi, Kwandare and Alamis markets. Markets selected from Nassarawa Eggon Local Government Area are: Mada Station, Akun, Fadama Bauna, Nassarawa Eggon, and Alogani markets. Market selected from Doma Local Government Area include: Rutu, Alagye, Agbashi, Rukubi and Doma markets. Observation of ethno fauna materials and unofficial interview of respondents (medical practitioners) which lasted for a period of three (3) weeks. Data was collected on the extent to which people in the study area uses medicinal animals for treatment of various diseases and the prevailing disease in the study area. Record of age group mostly

involved in treatment practices in the study area, were taken and questions were asked to confirm if there were any threat to conversation of medicinal animals in the study areas? Their source of collection were recorded, wild animal parts essential for ailment, their preparation mode, local name of the animal was identified in the study area.

2.3 Data Analysis

Data collected were analyzed using simple descriptive statistics and Information Consensus Factor (ICF) according to Gazzaneo et al., (2005), the ICF is expressed as:

ICF = $\frac{Nur-Nt}{Nur-I}$ …… (1)

All data collected on reported ailment were grouped into various categories. According to Betti (2004), step number 1 information consensus factor (ICF). The ICF is low (close to 0) if the animal is chosen randomly, or if informants do not exchange information about their uses. The ICF value is high (close to 1), if there is well-defined selection criterion in the local market and if information is exchanged between informants. The information consensus Factor (ICF) was calculated for each categories of ailment to identify the agreement of the information on the reported cures for the group of ailment.

3.0 Results and Discussion

3.1 Socio-Demographic Attribute of Traditional Medical Practitioner

Gender: the result showed that most (60.0%) of the respondents were male while few (40.0%) were female (Table 1). The reason for this result could be that most women in rural areas or the study areas believe that traditional medicinal practitioner is a male profession. The findings corroborated the work of Odu (1987): in a similar study in Ogun State where they found that men were more involved in traditional medical practice than women.

Age- Most of the respondents (31.7%) fall within the age range of 41-50 years, 25.% were within the age 61-70 years (Table 1). The result revealed that age contributed to the involvement of youth (41- 50 years) in the active practice of traditional medicine. The age category of 31-60 years representing 42 (70.1%), while age 61 and above representing the adult in old people at 29.9%. This indicates that there is going to be future improvement in trado-medical practices.

Marital Status: Majority (73.3%) of the respondents were married. Being married correspond with the business they do. Like every other farming activities their wives and children can assist them in the business and collections of materials that will enable them learn automatically (Table 1).

Educational level: The result also shows that (73.3%) of the respondents had non-formal education, (15.7%) had primary education while 11.7% had secondary education. Based on the survey, most people who engaged in the practice of traditional medicine are illiterates and do not attain any reasonable level of education (Table 1).

3.2 Experience and activities of trado-medical practitioners

Years of Herbal Practice: Most (63.3%) of the respondents are 10-20 years in practice. 16.7% fall within 21-30 years in practice while 11.7% and 8.3% fall within 31-40 and 41-50 years in practice respectively. The result shows that not many youth are engaged in the practice until recent years. The old people who engaged in the practice are becoming very few (Table 1).

Source of Information: the result further shows that most (68.3%) of the respondent got their information on herbal practice through inheritance. Others got theirs through traditional medical associations (26.7%) and 5.0% got their own from printed materials (Table 1).

Mode of Herbal Practice: Majority of the respondents (78.0%) engaged in fulltime herbal practice while 22.0 % of the respondents are engaged in part-time herbal practice, i.e some engage in farming and as well practice herbal medicine. They use to attend to people during off farming season and in the evening when they have returned from farm (Table 1).

Source of Materials: From table 1, majority (56.7%) of the respondents got their materials for the practice from wild forest while, 33.3% purchase theirs from hawkers. 3.3% and 6.7% got their own form home gardens and Markets respectively.

Government Assistance: Most 40 (66.6%) get their materials to their shop through personal collection. It is less expensive but laborious; 20 (33.33%) Purchase theirs from hawkers. 1 (1.7%) get assistance from government that is to say there is no government support according to the respondent **(**Table 1).

Threat to Conservation: (Table 1) shows that most 80.0% of the respondents cause threat to conservation and only 20.0% of the respondents have not enforced threat to conservation as corroborated the work of Adeola (1992) which says that most of the practitioners posed threat to conservation when collecting materials for the practice.

Common and uncommon Animal Used: The result further shows that 48 (80%) of the animal used are terrestrial and not common for example, lion, squirrel, snake, porcupine, lizard, monkey, antelope and 12(20%) are aquatic animals found and are used for treatment. 40 (66.7%) of respondent stated that most terrestrial animals used are not common. Example, elephant, Chimpanzee, Leopard, python, and it is a serious problem to the traditional medical practitioners. 20 (33.3%) of the respondents says aquatic animal used are not found so they have to go outside the study area to purchase them (Table 1).

The diseases cured: 26 (43.3%) of the respondents used to treat diseases such as non-contagious e.g impotency infertility in women, Asthma, cancer, rheumatism, appease witches, bone fracture, cough, while 17 (28%) of the respondents treat contagious such as sexually transmitted diseases, tuberculosis and 17 (28.3%) of the respondents in the study area treat inherited diseases like insanity or mental illness, elephantiasis, blindness and anaemia.

Age group of most frequent patients: According to the study conducted in the study area: Lafia, Doma and Nassarawa Eggon Most of the respondents (45.0%) claimed that most of their patients are adult. Most of the diseases are related to adult e.g. impotency, infertility, cancer, and asthma. 26.7% of the respondents treat children and 28.3 of the respondent treat pregnant women. This study shows that fauna based-trado medicinal preparation in various forms has wide acceptance

among the people in the study area. This fauna species are often used in conjunction with one or more other animal and/or plant species, though there are some situation in which a single-species preparation is employed in treatment. The use with other species of plant and animals may be due to either synergistic or additive effects of the constituents as passed down from one generation to another by tradition based on observation and trials for several years, (Igoli et al.,2005, Soewu, 2006). It was discover that choice of animals species in trado-medicinal preparations is guided by several factors, some of which include:

i. The recognized bioactive ingredients in the animal part.
ii Some behavioral ecological tendencies naturally associated with animals or the concerned part.
iii Some mythological conceptions surrounding the animals.
iv The array of complimentary ingredients, faunistic or floristic, often possesses some behavioral ecological tendencies to that of the main fauna species as far as the condition to be treated is concerned.

These findings corroborated earlier suggestion that the choice of animal for a particular purpose is probably made on basis unique co-evaluation between social and ecological system (IUCN,1997).

4.0 Conclusion and Recommendation

4.1 Conclusion

While the used of floristic resources has been widely researched, utilization of faunistics resources in traditional medicines is little researched in the study area. There is an urgent need to systematically document uses of wild animal for their medicinal values in all communities. This need arises due to the fact that the old folks are usually the custodian of such information and the disappearance of traditional cultures and natural resources arising from urbanization and industrialization in these areas could result in the loss of trado-medical information forever.

Restoration of natural habitats is one major way to enhance continued availability of animal species that will be available for traditional medicine, especially species presently under threat of extinction.

5.2 Recommendation

Based on the result of the study the following recommendations are made:

i. These valuable animals species should be domesticated rather than wild hunting.
ii More research should be conducted by Pharmaceutical companies to ascertain the efficacy of these animals in trado-medical practice.
iii Youth should be encouraged to partake in trado-medicine to secure future practices.
iv. Illegal poaching and deforestation should be totally discouraged through stiffer penalties

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Table 1: The Socio-demography of attributes and activities of traditional medicinal practitioner in the study area.

Gender	Frequency	Percentage
Male	39	60.00
Female	21	40.00
Total	60	100.00
Age	8	13.4
30-40 years	19	31.7
41-50 years	15	25.0
51-60 years	10	16.7
70 years above	8	13.4
Total	60	100.0
Marital Status		
Married	44	73.3
Single	16	26.7
Total	60	100.00
Educational Level		
Non-formal education	44	73.3
Primary	9	15.7
Secondary	7	11.7
Total	60	100.00

Years of Experience		
10 -20 years	38	63.3
21-30 years	10	16.7
31-40 years	7	11.7
41-50 years	5	8.3
Total	60	100.00
Mode of Herbal Practice		
Full time	48	78.0
Part time	12	22.00
Total	60	100.00
Source of Materials		
From wild Forest	34	56.7
hawkers	20	33.3
Home gardens	2	3.3
Markets	4	6.7
Total	60	100.00
Ownership of Shop		
Yes	23	38.3
No	37	61.7
Total	60	100.00
Government Assistance		
Yes	1	1.7
No	59	98.3
Total	60	100.00
Threat to Conservation		
Yes	48	80
No	12	20
Total	60	100.00
Common animal used		
Yes	48	80.0
No	12	20.0
Total	60	100.00
Uncommon animal used		
Aquatic	40	66.7
Terrestrial	20	33.3
Total	60	100.00
Types of Disease Cured		
Non-contagious	26	43.3

Contagious	17	28.4
Inheritance	17	28.3
Total	60	100.00
Most patronized age group		
Adult	27	45.0
Children	16	26.7
Pregnant women	17	28.3
Total	17	28.3