

EVALUATION OF THE USES OF MEDICINAL PLANTS AMONG RURAL HOUSEHOLDS IN EJIGBO LOCAL GOVERNMENT AREA, OSUN STATE, NIGERIA

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ABSTRACT

A survey of medicinal plants used in the treatment of diseases in rural households in Ejigbo Local Government Area of Osun state, Nigeria was carried out. Data were collected with the aid of pre-tested semi-structured questionnaire. Twenty villages out of thirty-three villages in the study area were randomly selected. Ten rural household heads were then randomly selected in each of the sampled village to make a total of 200 respondents. The result showed that 31 medicinal plants from 26 families are commonly used by the households to treat cough, malaria, sore, diarrhea and typhoid, among others. 30% of the respondents use medicinal plants because they are natural and 47% use medicinal plants because they are cheap. The result also showed that age group of 41-60years is the age group that mostly prefers to use medicinal plants while 75% of the uneducated prefer to use medicinal plants. This shows that the direct use of plant for curing and healing which is as old as man is still being used in many communities today. Problems faced by respondents in the use of medicinal plants in the study area include unfavourable weather condition, insect/snakebite, time wastage, high energy usage and unpleasant odour and taste. The state forestry Department will do well to encourage establishment of communal woodlots to increase the supply of fuel wood needed to prepare medicinal plants.

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KEYWORDS: medicinal plants, non timber forest products, rural households, osun state, Nigeria

INTRODUCTION

Historically mankind has depended on timber more than Non Timber Forest Products (NTFPs). For a long time much emphasis has been laid on timber products at the expense of NTFPs by foresters and development planners. Today however, the demand from forestry practice has gone beyond the production of only timber/ wood product. Rural communities rely to a great extent on the multi-purpose nature of forest plant resources for meeting their general needs. As noted by Neumann and Hirsch (2000) a NTFP is literally any and every natural resource from the forest except timber.

Wickens (1991) noted that NTFPs are 'all the biological material (other than industrial round wood and derived sawn timber, wood chips, wood-based panels and pulp) that may be extracted from natural ecosystems, managed plantations, etc., and be utilised within the household, be marketed, or have social, cultural or religious significance. As such non-timber forest products include food, medicinal plants, herbs, shrubs, oil resin, tannins, sponge, ropes etc. The direct use of plant for curing and healing is as old as man himself. In Nigeria forest plants are a very valuable source of herbal medicine upon which all

our rural communities have for ages depended for healthy way of living. It is not surprising that in recent years, the medicinal use of plant materials as integral part of medical practices is gaining ground in many parts of the world. China has several botanical gardens devoted entirely to medicinal tree, about 1,000 trees are used regularly by 400 million people. Traditional medicine has a long history. WHO (2000) defined it as the total knowledge, skills and practices based on the theories, belief and experiences of indigenous people to different cultures used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of mental and physical illness. The uses of medicinal plants in rural areas vary greatly from country to country and are influenced by factors such as culture, history, personal attitudes and philosophy. According to WHO (2002) though it has not been scientifically proven but it has been observed and locally proven that traditional medicine are well known to be used in the treatment of various human ailments especially by the rural people in developing countries. They also provide the necessary nutrients for the growth and development of the human body. However there is not enough information on how the various indigenous groups use the different medicinal plants. As most

parents or herbalists die with the information due to lack of proper document on the use of medicinal plants. This research work will therefore help to provide a forum for the documentation of information on how rural dwellers in Ejigbo LGA, Osun state, Nigeria use medicinal plants to cure different kinds of ailments. This will help herbal practitioners to integrate this with the knowledge they have on how other indigenous groups in Africa use medicinal plants to cure different ailments. This no doubt will bring improvement to the use of medicinal plants.

Despite the fact that the use of medicinal plants seems to be gaining increasing popularity in the country, its uses has been plagued with many problems. These include unhygienic preparation method, seasonal variation in the availability of medicinal plants, lack of quality control in the use of medicinal plants, lack of proper safety measures and no proper documentation. For instance poor documentation on the use of medicinal plants has led to loss of knowledge and information on the use of medicinal plants in the country (Okafor, 2001). Transfer of knowledge on the use of medicinal plants is being lost from one generation to another due to lack of proper education and no proper scientific certification. This has not helped to improve the use of medicinal plants. The use of herbal medicinal is very popular among the rural dwellers and urban poor in Nigeria. This is because many rural dwellers and urban poor cannot afford to pay for the use of orthodox drugs. They therefore rely on the use of medicinal plants to cure their ailment and maintain their health (Yakubu. 2001). It is estimated that today, plant materials provided the model for 60% western drugs (WHO, 2002). Over 80% of the drugs in hospital today have been introduced in the last 60-70 years and one can understand the important role traditional medicinal has played in the past (Raza,

1983). The World Health Organization as reported by (Sokenu, 2000) estimates that up to 80% of the world's people rely on plant for their primary health care, since western pharmaceuticals are often expensive, inaccessible or unsuitable. The successful health care system in most the potential and medicinal uses of plants. This research work evaluate the various ways by which the rural households are involved in the use of medicinal plants in the study area, also the roles of rural households in the use of medicinal plants was examined and problems faced by rural households in the use of medicinal plants were identified.

METHODOLOGY

Study Area

This study was carried out in Ejigbo Local Government Area, Osun State. The Local Government is located in Northern part of Osun State and it lies between latitude 4° to 9° North and longitudes 3° to 10° East. Ejigbo Local Government is bounded in the north by Surulere Local Government Area, in the east by Ogo-Oluwa Local Government Area all in Oyo State. In the west by Ola-Oluwa Local Government Area of Osun State and in the south by Afijo Local Government Area in Oyo State. (Figure 1). The climate of Ejigbo Local Government Area is a tropical Climate with two distinctive seasons; the rainy season and the wet season. The rainy season starts from March and ended by October while the dry season starts from November to February. The temperature range is from 28°C to 30°C. The temperature is extremely high during dry season and cool during wet season (Adejoba2011).

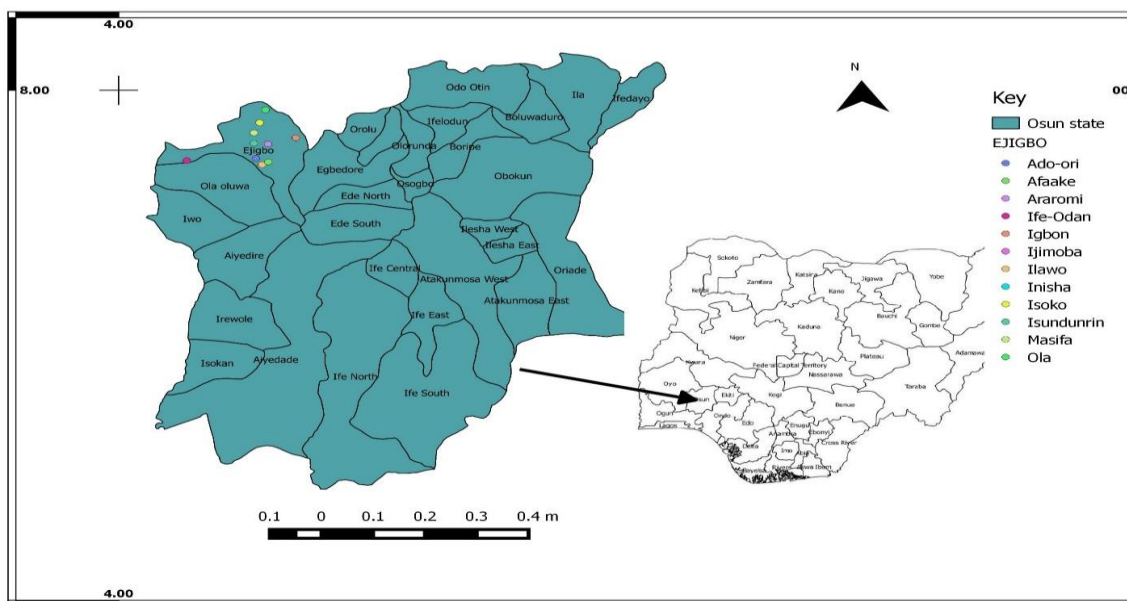


Figure 1: Map of Osun state showing the study area

Method of Data Collection

Twenty Villages out of thirty-three, Villages were randomly selected in the study area. Ten rural household heads were randomly selected in each sampled village to make a total of 200 respondents. The socio- economic information about the people were collected and other information concerning the use of medicinal plants. The study however has a little limitation. This is through the fact that not all the respondents were willing to freely give information. It takes a lot of persuasion and explanation to convince some respondents that the whole exercise is for academic purpose and not to harness their knowledge for personal or selfish gains.

RESULTS AND DISCUSSION

Socio Economic Characteristics of the Respondents

The age of the respondents ranged between 41-60 years and above 60 years, 56.8% of the respondents have their ages between 41 years-60 years which is the largest number of respondents. 43.2% are above 60 years of age. For the level of education, 29% had primary education while 21% had secondary school education, 3% of the respondents had tertiary education while 46% had no educational background at all(Table 1). 91% of the respondents in the study area are involved in the preparation and use of medicinal plants. 6% of the respondents are involved only in the use of medicinal plants while 3% of the respondents are involved in the preparation of medicinal plants only in the study area (Table1). This shows that majority of those that are involved in the preparation of medicinal plants are also involved in the use. Only few of the respondents are involved in the preparation of medicinal plants but are not involved in the use. Table 1 further shows that 30% of the respondents use medicinal plants because they are natural. 47% said they use medicinal plants because they are cheap. 20% said they use medicinal plants because they are effective while 3% said they use medicinal plants because they are easily available. The fairly high percentage of those that use medicinal plants because they are cheap further proves the reason why many rural dwellers use medicinal plants. The high level of poverty in the rural areas prevents many rural dwellers from buying orthodox drugs.

Medicinal Plants Used By Rural Households in the Study Area

Table 2 presented the result of the medicinal plants used by respondents in the study area. The result showed a total number of 31 medicinal plants from 26 families are commonly used by the households in the study area. It showed the percentage of respondents that use each plant species per community. It was observed that *Terminalia avicennooides* has the highest percentage. 70% and 87.5% of the respondents in Ola and Idi Igba

communities of the study area respectively use *Terminalia avicennooides* as medicinal plant. This is closely followed by *Cola nitida* with 70% and 71.4% of the respondents in Ola and Igbon communities respectively uses *Cola nitida* as medicinal plant. .75% and 60% of the respondents in Ijimoba and Osinmo communities respectively use *Jatropha curcas* as medicinal plants. The reason why these species are used by the people more than other species may be attributed to their availability. That is these plants species are easy to get. Table 3 shows that leaves are the most important and the most common plant part used by respondents in the preparation of herbal medicine in the study area. This is followed by barks and then roots. It should however be noted that using roots of plants in the preparation of herbal medicine could lead to the killing of plants. Such plants can become threatened and as such the use of plant roots should not be encouraged.

Table 1: Socio economic characteristics of the respondents in the Study area

age of respondent	Frequency	Percent
41-60	113	56.8
>60	86	43.2
Total	199	100.0
Educational status		
Primary	58	29
Secondary	42	21
Tertiary	6	3.0
No education	91	46
Total	197	99.0
Involvement in the use of medicinal plants		
Use	11	6
Preparation	6	3
Preparation and use	181	91.0
Total	198	99.5
Reasons for preference		
Natural	59	30
Cheap	93	47
Effective	40	20
Easily available	6	3
Total	198	100

Source: Field survey, 2015

Table 4 shows respondents use of medicinal plants in relation to some important socio-economic characteristics of respondents in the study area. The age group of 41-60years has the highest percentage (64%) of the age group that prefer the use of medicinal plants. while 39.5% prefer using the orthodox drugs. 59.6% of age group above 60years prefer using medicinal plants while 36% prefer using orthodox drugs. None of the respondents below 40 years of age said they prefer using medicinal plants. This means the young generations do not like using medicinal plants. This might probably be due to the bitterness of most medicinal plants or due to unpleasant smell of most medicinal plants.. 58.7% and 53^ of those that had primary education and secondary education respectively prefer to use medicinal plants. 75% of the uneducated prefer to use

medicinal plants while 33% of those that had tertiary education use medicinal plants in the study area. This means that more of the uneducated people use medicinal plants than the educated elites. This is in line with the findings of Adedayo (2007) who noted that educational qualification has a significant association with the use of medicinal plants in Akure, Ondo State, Nigeria.

Table 5 shows common medicinal plant species used by respondents and the ailment they are used to treat in the study area. The commonest ailment in the study area is malaria. This is because the study area is in the tropics and malaria is the commonest sickness in the tropics. As such many medicinal plants are used to treat malaria in the study area. These include; *Gossypium barbadense*, *Cassia siamea*, *Daniella oliveri*, *Pilostigma thonningi*, *Anthocleista djalonensis*, *Khaya senegalensis*, *Azadirachta indica*, *Mangifera indica*, *Morinda lucida*, *Citrus aurantifolia* and *Annacadium occyentalis*. Talkmore *et. al.* (2015) noted that 50% of the Zimbabwean population is at risk of contracting malaria each year, the majority of people, especially in rural areas, use traditional plant-based medicines to combat malaria. Plant species like *Annona senegalensis* and *Cola nitida* are used to treat low sperm count using the leaves of the species, The leaves of *Calotropis procera* and *Parkia biglobosa* are used to treat skin rashes. Also the leaves and bark of *Terminalia avicenooides* is used to treat cough and diarrhea. The leaves and seeds of *Phyllanthus amarus* is used to treat high blood pressure while the green fruit of *Musa padansiaca* is used to treat diabetes.

Problems faced by Rural Households in the use of Medicinal Plants

Table 6 shows that the problems faced by respondents in the use of medicinal plants can be categorized into three groups. These are problems faced by respondents during collection of medicinal plants, problems faced during preparation of medicinal plants and problems faced during usage. 72.5% of the respondents in the study area face the problem of unfavourable weather condition in the collection of medicinal plants. This unfavourable weather condition exists in form of either high rainfall or hot sun during collection of medicinal plants. Many people working on the field either collecting medicinal plants or firewood will prefer clement weather. They see high rainfall or hot sun as hindrance to their work on the field. Closely following the problem of unfavourable weather

condition is the problem of insect/snake bite. 72% of the respondents in the study area stated that they face the problem of insect/ snake bite. The reason for this is not unconnected with the fact that tropical regions all over the world are characterized by abundance of insects that can bite people as well as snakes. As such people working on the field are usually faced with this problem. 66% of the respondents face the problem of scarcity of medicinal plants in the study area. The reason for this is likely to be due to high exploitation of some species coupled with high rate of deforestation in the country leading to many of the plant species becoming threatened. This therefore leads to scarcity of many species resulting in unwarranted time wasting.

71.5% and 70.5% of the respondents said they face the problem of time wastage and high energy usage respectively in the preparation of medicinal plants. The process of preparing medicinal plants is always time and energy consuming. It involves washing the plant materials, getting and mixing the required quantity, boiling of medicinal plants for a long period of time in order to extract the active ingredients in the plant parts and then proper packaging of medicinal plants. All the above mentioned procedures of preparing medicinal plants are time and energy consuming.

The dominant problems faced by respondents in the usage of medicinal plants in the study area are unpleasant odour and taste and the problem of no expiry date. 66% of the respondents said unpleasant odour is the problem they face in the use of medicinal plants in the study area, Many of the medicinal plants are known to have unpleasant odour after preparation which tend to discourage many people from using them. 51% of the respondents face the problem of unpleasant taste in the use of medicinal plants in the study area. Many people claim that medicinal plants are usually bitter. These bitterness discourage many people especially children and youths from using medicinal plants. 11% of the respondents claim that the problem they face in the use of medicinal plants is that there is no expiry date attached to it. This is a problem because when drugs have expired they can be dangerous or even poisonous. As such many people are reluctant to use medicinal plants. Akinnifesi *et. al.* (2008) reported that most people taking medicinal plants are awareness of some possible dangers it poses. This danger can be in form of expiry date or no specific measurement for the quantity of usage.

Table 2: Percentage (%) abundance of common medicinal plants used by rural households in the study area

Medicinal plants/Communities	Family	Masifa %	Aye %	Ado- ori- oke %	Isoko %	Owuile %	Inisha %	Ola %	Ilawo %	Alato %	Agurodo %
<i>Amaranthus spinous</i> Linn	Amarenthaceae	20	11.1	40	22.2	10	10	0	22.20	20	10
<i>Cassia Siamea</i> Lam	Caesalpinianaceae	30	11.1	20	44.4	30	30	30	22.2	30	60
<i>Spondiasmombin</i> Linn	Anacardiaceae	40	11.1	20	33.3	0	10	10	44.4	30	40
<i>Annona senegalensis</i> Pers	Annonaceae	40	11.1	20	22.2	10	10	10	22.2	10	20
<i>Calotropisprocera</i> (Ait.) Ait. f.	Asclepiadaceae	20	0	20	22.2	10	10	10	33.3	30	20
<i>Gossypiumbarbadense</i> Linn	Malvaceae	10	22.2	0	33.3	30	20	0	22.2	10	20
<i>Danielliaoliveri</i> (Rolle) Hutch. &Dalz.	Caesalpinioideae	40	22.2	0	44.4	20	30	30	44.4	40	60
<i>Piliostigma</i> thinningii(Schum.) Milne-Redhead	Caesalpinianaceae	30	11.1	0	22.2	20	20	30	11.1	10	30
<i>Cola nitida</i> (Vent.) Schott &Endl	Sterculiaceae	40	22.2	20	33.3	20	20	70	44.4	60	50
<i>Terminalia avicennooides</i> Guill. &Perr	Combretaceae	10	22.2	20	22.2	10	10	70	22.2	30	20
<i>Jatropha curcas</i> Linn	Euphorbiaceae	40	22.2	20	11.1	10	50	60	11.1	20	0
<i>Colocynthisvulgans</i> Schrad	Cucubitaceae	20	22.2	20	11.1	10	30	40	11.1	10	20
<i>Momordicacharantia</i> Linn	Cucubitaceae	10	22.2	40	0	30	20	0	22.2	30	20
<i>Phyllanthusamarus</i> Schum. &Thonn.	Euphorbiaceae	0	22.2	20	11.1	30	10	40	22.2	20	10
<i>Anthocleista</i> djalonesisA.Chev.	Loganiaceae	0	22.2	20	0	20	10	10	11.1	0	10
<i>Khayasenegalensis</i> (Desr.) A. Juss.	Meliaceae	0	44.4	20	22.2	40	20	20	22.2	50	0
<i>Azadiractha</i> indica A. Juss.	Meliaceae	0	0	0	11.1	0	20	10	0	0	0
<i>Parkia</i> biglobosa(Jacq.) R. Br. Ex G. Don	Mimosoideae	0	0	0	0	0	0	10	0	0	0
<i>Piper guineense</i> Schum. &Thonn.	Piperaceae	0	22.2	20	11.1	20	20	0	0	20	0
<i>Waltheria</i> indicaLinn.	Sterculiacene	10	44.4	20	22.2	40	20	0	22.2	10	10
<i>Musa panadisiaca</i>	Musaceae	20	33.3	20	22.2	40	20	0	33.3	30	30
<i>Pupalia</i> lappacea	Amaranthaceae	20	0	20	11.1	0	0	0	11.1	10	10
<i>Garcinia kola</i> Heckel	Guttiferae	10	33.3	0	33.3	50	20	30	22.2	10	30
<i>Magnifer</i> aindicaLinn.	Anacardiaceae	10	0	0	11.1	0	20	10	0	0	0
<i>Moringa</i> lucidaBenth	Rubiaceae	10	0	0	0	0	0	0	0	0	0
<i>Citrus limon</i> Lime	Rutaceae	10	0	0	11.1	0	10	0	0	10	0
<i>Psidium</i> guajavaLinn	Myrtaceae	10	0	0	0	0	0	0	0	0	0
<i>Alstonia</i> booneiDe Wild	Apocynaceae	10	22.2	20	0	30	10	10	11.1	0	20
<i>Xylopia</i> aethiopica(Dunal) A. Rich	Annonaceae	10	0	0	0	10	10	0	0	0	0
<i>Carica papaya</i> Linn	Caricaceae	0	0	0	0	0	0	0	0	0	0
<i>Anacardium</i> occidentale Linn	Anacardiaceae	0	0	0	0	0	0	10	0	0	0

Table 2 (cont): Percentage (%) abundance of common medicinal plants used by rural household in the study area continue

Medicinal plants/Communities	Family	Isundunrin %	Osinmo %	Ika %	Ijimoba %	Iife-Odan %	Araromi -iwata %	Igbon %	Afaake %	Idi Igba %	Inisha-Edoro %
<i>Amaranthus spinous</i>	Amarenthaceae	10	20	10	0	0	0	28.6	0	0	0
<i>Cassia Siamea</i> Lam	Caesalpinianaceae	30	40	20	25	0	22.2	57.1	37.5	0	55.5
<i>Spondias mombin</i> Linn	Anacardiaceae	10	20	50	0	0	0	71.4	25	12.25	22.2
<i>Annona senegalensis</i> Pers	Annonaceae	10	0	30	25	10	0	0	0	0	44.4
<i>Calotropisprocera</i> (Ait.) Ait. f.	Asclepiadaceae	10	0	20	0	0	0	28.6	12.5	0	33.3
<i>Gossypiumbarbade nse</i> Linn	Malvaceae	10	0	20	0	0	0	0	0	12.25	0
<i>Danielliaoliveri</i> (Rolf) Hutch. &Dalz.	Caesalpinioideae	50	20	50	25	0	22.2	57.1	37.5	0	55.5
<i>Ptilostigmathomning ii</i> (Schum.) Milne-Redhead	Caesalpinianaceae	10	20	10	0	0	0	14.3	12.5	12.25	33.3
<i>Cola nitida</i>	Sterculiaceae	50	60	30	25	10	11.1	71.4	37.5	25	33.3
<i>Terminalia avicennooides</i> Guill.&Perr	Combretaceae	30	60	20	12.5	0	11.1	28.6	37.5	87.5	55.5
<i>Jatropha curcas</i> Linn	Euphorbiaceae	30	60	30	75	0	11.1	14.3	37.5	62.5	0
<i>Colocynthisvulgans</i>	Cucubitaceae	20	40	20	37.5	10	11.1	0	37.5	50	0
<i>Momodicacharantha</i>	Cucubitaceae	20	40	30	12.5	20	0	0	37.5	62.5	11.1
<i>Phyllanthusamarus</i> Schum. &Thonn.	Euphorbiaceae	20	40	10	0	0	0	14.3	50	12.5	0
<i>Anthocleistaadjalone sis</i> A. Chev.	Loganiaceae	20	0	10	12.5	0	0	0	12.5	12.5	11.1
<i>Khayasenegalensis</i> (Desr.) A. Juss.	Meliaceae	20	20	10	0	70	0	28.6	12.5	12.5	0
<i>Azadirachthaindica</i> A. Juss.	Meliaceae	0	0	0	25	30	22.2	0	0	0	0
<i>Parkiabiglobosa</i> (Jacq.) R. Br. Ex G. Don	Mimosoideae	0	0	0	0	10	0	0	0	0	0
<i>Piper guineense</i> Schum. &Thonn.	Piperaceae	10	20	20	12.5	0	0	14.3	25	0	0
<i>Waltheriaindica</i> Lin	Sterculiacene	20	0	10	12.5	20	0	14.3	0	12.25	11.1
<i>Musa panadisiaca</i>	Musaceae	20	0	10	0	10	11.1	0	12.5	0	0
<i>Pupalialappacea</i>	Amaranthaceae	0	0	10	0	0	0	28.6	0	12.25	11.1
<i>Garcinia kola</i> Heckel	Guttiferae	50	20	20	0	50	0	0	12.5	0	22.2
<i>Magniferaindica</i> Lin	Anacardiaceae	0	0	0	25	30	22.2	0	0	0	0
<i>Moringalucida</i> Benth	Rubiaceae	0	0	0	0	10	33.3	0	0	0	0
<i>Citrus limon</i> Lime	Rutaceae	0	0	0	12.5	10	0	0	0	0	0
<i>Psidiumguajava</i> Lin	Myrtaceae	0	0	0	0	20	0	28.6	0	25	11.1
<i>Alstoniaboonei</i> De Wild	Apocynaceae	30	20	10	0	10	11.1	0	25	0	0
<i>Xylopiiaaethiopica</i> (Dunal) A. Rich	Annonaceae	0	0	0	0	40	11.1	0	0	0	22.2
<i>Carica papaya</i> Linn	Caricaceae	0	0	0	0	10	11.1	0	0	0	0
<i>Anacardium occidentale</i> Linn	Anacardiaceae	0	0	0	12.5	20	0	0	0	0	0

Table 3: Plant parts used as medicinal plants by respondents in the study area

Communities/Plant parts	Root	Leaf	Bark	Seed	Fruits	Flower	Whole plant	Exudate	Total
Masifa	7	28	14	3	4	3	1	4	64
Aye	3	14	17	6	5	1	3	2	51
Ado-ori-oke	2	9	5	3	2	1	2	2	26
Isoko	5	27	14	5	3	4	1	1	60
Owuile	2	13	16	10	2	2	4	1	50
Inisha	7	20	13	7	6	2	2	5	62
Ola	8	17	25	1	6	3	3	6	69
Ilawo	2	20	14	3	3	2	3	1	48
Alato	4	19	17	4	5	3	5	2	59
Agurodo	8	22	18	3	5	6	2	0	64
Isundunrin	7	13	21	6	5	4	4	3	63
Osinmo	5	8	10	2	2	2	3	3	35
Ika	6	19	14	6	5	2	3	3	58
Ijimoba	6	17	8	3	4	2	2	4	46
Ife-Odan	3	16	20	6	12	0	1	1	59
Araromi-iwata	4	14	10	3	4	0	0	1	36
Igbon	3	15	13	4	1	4	1	1	42
Afaake	5	10	14	2	2	3	7	3	46
Idi Igba	5	10	19	1	6	1	6	5	53
Inisha-Edoro	7	26	25	3	3	5	0	1	70
Total	99	337	307	81	83	50	53	49	1059

Table 4: Respondents' use of medicinal plants in relation to demographic characteristics of respondents in the study area

Demographic index	Use medicinal plants		Do not use medicinal plants		Total
	Frequency	%	Frequency	%	
Age Group (Years)					
Less than 20	0	0	0	0	0
21-40	0	0	0	0	0
41-60	68	59.6	45	39.5	114
Above60	55	64	31	36	53
Education level					
Primary	34	58.6	24	41.4	58
Secondary	66	53	59	47	125
Tertiary	2	33	4	67	6
No education	6	75	2	25	8
Marital Status					
Single	10	90.9	1	9.1	11
Married	102	57.6	74	41.8	176
Divorce	11	91.7	1	8.3	12

Table 5: Medicinal Plants used by respondents and the ailment cured in the Study area

S/N	MEDICINAL PLANT	PARTS USED	AILMENT CURE
1	<i>Amaranthus spinous</i>	Leaf	Cough
2	<i>Cassia siamea</i>	Flowers,Roots	Malaria
3	<i>Spondias mombins</i>	Leaves	Blood replacement
4	<i>Annona senegalensis</i>	Leaves	Low sperm count
5	<i>Calotropis procera</i>	Leaves	Rashes
6	<i>Gossypium barbadense</i>	Green leaf	Cough, Malaria
7	<i>Daniela oliveri</i>	Bark	Malaria, Diabetes
8	<i>Pilostigma thonningi</i>	Leaves, Bark	Malaria
9	<i>Cola nitida</i>	Bark	Low sperm count
10	<i>Terminalia avicenooides</i>	Leaves, Bark	Cough, Diarrhea
11	<i>Jatropha curcas</i>	Exudate, Root	Mouth diseases, Sore
12	<i>Colocynthis vulgans</i>	Fruits	Gonorrhea
13	<i>Momodica charantha</i>	Whole plant	Gonorrhea/Fever
14	<i>Phyllanthus amarus</i>	Leaves and seed	Fever, high blood pressure
15	<i>Anthocleista djalensis</i>	Leaves	Cough, Malaria
16	<i>Khaya senegalensis</i>	Bark	Pile, malaria
17	<i>Azadirachta indica</i>	Bark, Leaves	Malaria
18	<i>Parkia biglobosa</i>	Bark	Skin Rashes
19	<i>Piper guineense</i>	Seed	Rotting teeth
20	<i>Waltheria indica</i>	Leaves	Dysentery
21	<i>Musa panadisica</i>	Green Fruit	Diabetes
22	<i>Pupalia lappacea</i>	Leaf,Seed	Women sterility
23	<i>Garcinia cola</i>	Seed	Asthma, cough
24	<i>Magnifera indica</i>	Stem	Malaria
25	<i>Morinda lucida</i>	Leaf	Malaria
26	<i>Citrus aurantifolia</i>	Leaves	Malaria
27	<i>Psedium guajava</i>	Bark	Skin Rashes
28	<i>Alstonia boonei</i>	Bark,	Rashes, Fever
29	<i>Xylophia aethiopica</i>	Seed	Teeth Rotting
30	<i>Carica papaya</i>	Fruits, Exudate	Typhoid
31	<i>Anacardium occidentale</i>	leaf	Malaria

Table 6: Problems faced by rural households in the collection, preparation and usage of medicinal drugs

	Frequency	%
Problem faced during collection		
Unfavourable weather	145	72.5
Scarcity	132	66
Insect/Snake bite	144	72
Problems faced during Preparation		
Energy consuming	141	70.5
High fuel consumption	17	8.5
Time wastage	143	71.5
Problem faced during usage		
Unpleasant Odour	132	66
Unpleasant taste	102	51
No expiry date	21	11
Stomach disorder	2	1.0

CONCLUSION AND RECOMMENDATIONS

Conclusion

This study has shown that respondents use 31 different medicinal plants from 26 families in the treatment of different ailments in the study area. *Terminalia avicennoides* is the most commonly used medicinal plants by respondents in the study area. This is followed by *Cola nitida* and *Jatropha curcas*. Many of the medicinal plants are used by respondents to treat malaria which the commonest ailment in the study area. Leaves are the most important and the most common plant part used by respondents in the preparation of herbal medicine in the study area. This is followed by barks and then roots. The study also shows that the young generation (Children and youth) do not like using medicinal plants. The age group of 41-60years has the highest percentage (64%) of the age group that prefers the use of medicinal plants. in the study area. In addition the uneducated use medicinal plants more than the educated elites in the study area.

Respondents are however faced with some problems in the use of medicinal plants in the study area. These are problems are categorized into three. They include problems faced during collection of medicinal plants, problems faced during preparation of medicinal plants and problems faced during usage. Problems faced during collection include; unfavourable weather condition, problem of insect/snake bite and increasing scarcity, Problems faced during preparation of medicinal plants include unusual time wastage and high energy usage. Problems faced by respondents in the usage of medicinal plants are unpleasant odour and taste and the problem of no expiry date.

RECOMMENDATIONS

In view of the findings of this research the following are hereby recommended

1. Government should help rural households by providing subsidy on materials like boots and gloves. The subsidy will enable rural dwellers to buy boots and gloves which will protect them against snake bite which many of the respondents complained is a problem

they face during collection of medicinal plants.

2. Government should organize seminars for herbal medicine practitioners on the need to maintain good hygiene in the preparation of medicinal plants. In addition herbal practitioners should be taught in the seminar how to put label on the container of the medicinal plants stating the active ingredient of their medicinal plants and expiry date. This will go a long way in encouraging educated elites to use medicinal plants.
3. There is the need to encourage herbal practitioners to have their own herbal garden. This is where they will plant different types of medicinal plants which they use. This will help to prevent unnecessary time wasting in search of medicinal plants and also help to reduce risk of snake bite.
4. The state forestry Department should make concerted efforts to encourage rural communities to establish community wood lots where trees for fuel can be planted. The reason for this is because preparation of most medicinal plants involves the use of large quantity of fuel wood for cooking or boiling plant parts for medicinal purpose. This will help to prevent indiscriminate cutting of trees in forest protected areas.
5. The state forestry Department should find means of encouraging herbal practitioners to find means of properly documenting all the medicinal plants they know, how to prepare them and the ailment they cure. This is very important as it has been discovered that this knowledge is fast disappearing as many of the herbal practitioners lacked the knowledge of proper documentation of their herbal products.

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