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# ETHNOBOTANICAL SURVEY AND UTILISATION OF MEDICINAL PLANTS IN IJEBU-ODE METROPOLIS, OGUN STATE.

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## ABSTRACT

Investigations into this survey revealed some of the medicinal herbs utilized for treatment of some ailments by people of Ijebu-ode metropolis located in Ogun state, Nigeria. This ethnobotanical survey of some medicinal plants carried out in Ijebu ode enumerates the plants and plant parts such as stem, leaves, root and bark used to cure different ailments. A total of 51 plant species were highlighted for treatment of 17 different ailments. The study revealed that 22.2% of these plants are employed in curing rheumatism, 15.8% are employed in curing malaria fever, 7.9% and 9.5% are used in curing fontanelle anddiabetes respectively which clearly unveils percentage frequencies of herbs used in treatment of ailments in the study area. This study investigated wide range of medicinal plants used by Ijebu ode people to cure ailments. It implies our forests serve as homes to many medicinal plants with curative abilities for a lot of ailments.

**KEYWORDS**: Medicinal plants, ailments, herbs, trado-medical practice, plant parts, *ljebu-ode*.



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#### INTRODUCTION

The use of medicinal plants dates back to the time of the early man who used herbs to cure a number of diseases and enhance his living condition. These medicinal plants have been adopted overtime in the treatment of ailments and diseases (Tapsell*et al*, 2006). It is undeniable that Nigerians use medicinal plants for treatment of ailments based on beliefs, cost implication and effectiveness. The World Health Organization (WHO) estimates that 4 billion people, or 80 percent of the world's population, use herbal medicine for some aspect of primary health care.

Cox and Balick (1996) made it known that the ethnomedicinal uses of plants is one of the most successful criteria used by the pharmaceutical industry in finding new therapeutic agents for the various fields of biomedicine. Many of these medicinal plants used to improve wellbeing are majorly sourced from natural forest which implies the forest serves as homes for many medicinal plants.

These medicinal plants are now endangered due to destructive forest activities in most parts of Nigeria. This necessitates an ethnobotanical survey to document extensively and create record for these medicinal plants in order to prevent loss of knowledge of their parent plants which serves as sources for different plant parts employed in the treatment of diverse human diseases. Population increase on a daily basis leads to increase in demands for traditional herbal medicine, increase in demand for plant produce and products; and also the enormous use of floral species in the pharmaceutical companies all result in the threatening of floral species. Without these plants, the availability of herbs for the treatment of ailments is threatened.

People consider the forest as a gift of nature which has grossly affected the natural forest negatively. This belief encourages them to enter freely into the forest to engage in felling of trees of different plant species available in the natural forest resulting in depletion of our flora that mantle the earth. Continuous depletion of the natural forest is envisaged to have negative effects on generations unborn as a result of loss of important plant species and their knowledge. Therefore, documentation of these medicinal plants will make available the knowledge of medicinal plants and their uses in Nigeria and the world as a whole.



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## METHODOLOGY

The survey was carried out in Ijebu-ode town situated around 6.82 ° North of latitude, and 3.92 °East of longitude and 68 metres elevation above the sea level. Ijebu ode has about 209,175 inhabitants by population estimation (Most Complex maps for all cities in the world, 2011). A total of 100 respondents consisting of herbalists, herb sellers and traditional medical practitioners were interviewed from renowned markets where herbs are sold in Ijebu-ode. Numerous visits were made to the two major markets of the city namely; OkeAje and ItaOsu markets and other suburb markets. These suburb markets includes; Imepe, Italapo and Isiwo markets.

Interviews with herb sellers, trado-medical practitioners and consumers were carried out in these markets and some healing homes using structured questionnaires. These markets were considered because they are the notable markets where medicinal plant parts displayed are exchange for money to achieve desired economic satisfaction.

The herbs used for treating ailments were identified by the herb sellers by supplying their vernacular names while the scientific names were gathered from Gbile and Soladoye (2002), Nigerian trees Volume II (R.W. Keay et. al.1964) and the internet. Information gathered were analyzed and tabulated giving botanical names, common names, families, parts used and ailments cured.



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## **RESULT AND DISCUSION**

The demographic analysis revealed as presented in Table 1 that72% of the informants were females while 28% were male. It also showed that 57% were married, 18% were singles, 13% were divorced and 12% were widows. The data further revealed the occupation of the respondents showing, 51% were herb sellers, 32% were involved in trado-medical practices and 17% were herbalist. Also, the age distribution showed 39% were in between age 46 and 64, 26% were between age 31 and 45, 22% were above 65 years and 13% were between 18 and 30.

Furthermore, the study evinced that knowledge of the respondents about ethnobotany is influenced by their family background as most of them inherited knowledge of these herbs from parents or dead relatives.Suffness and Douros (1979) affirmed this that knowledge of herbal treatment was mainly acquired either by ancestral means or by training or both

The data collected indicate that various plant parts at varying frequency were employed in the treatment of different ailments. Table 1 reveals the Botanical, family and local names, plant parts used and ailment cured by plant species identified by the respondents. Table 2 shows a total of 51 plant species used for treatment of 17 ailments. The pie chart depicts 22.2% of these plants cure Rheumatism, 15.8% cures malaria fever, 7.9% cure Fontanelle, 9.5% cure diabetes. Apparently, Ijebu people employ the use ofmedicinal herbs in the treatment of ailment and diseases which are majorly sourced from the wild. The use of phytomedicinals is an alternative technique of accessing healthcare. This justifies the highpatronageexperienced in the sales of these herbs because it is cheap and available. Other factors influencing its high patronage include potency and efficacy. It is believed tobe an effective therapy and cure permanently. This gives credence to the fact thatmost forests are bombarded with harvest of herbs resultinginto over exploitation and extinction of some tree species.

It is evident that productions of some synthetic drugs are formulated with the use of extracts from medicinal plants.Drug discovery from medicinal plants has mainly relied on biological activity guided isolation methods which have led to the discovery of important drugs (Lahlou, 2007). Clinical, pharmacological, and chemical studies of these traditional medicines,



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which were derived predominantly from plants, were the basis of most early medicines such as aspirin, digitoxin, morphine, quinine, and pilocarpine (Butler, 2004). More research should be carried out on Phytomedicinalsso as to exploit the potentials embedded in them serving as a key to production of future medicines. This is also in conformity with the findings of Kunle*et al.* (2012) that plant materials are used throughout the developed and developing world as home remedies, in over-the-counter drug products, and as raw material for the pharmaceutical industry, and they represent a substantial proportion of the global drug market.

Apparently, herbal medicine has prevailed adopted in third world counties and more civilized countries. It is important to work on standardizing the dosage to give it a face lift and reduce the censure from different sources which is a major disadvantage. Kunle*et al.*, (2012) confirmed this that though herbal products have become increasingly popular throughout the world, one of the impediments in its acceptance is the lack of standard quality control profile. Thus, further research work on standardizing the dosage of these medicinal herbs is essential. Also, proper storage will help retain the curative properties and also retain their physical features asthere is no known side effect attributed to the use of phytomedicinals. Our medical health practitioners should also focus attention on more intense research on medicinal plants which can save the life our people without side effects (Soladoye*et al.*, 2010)



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## CONCLUSION AND RECOMMENDATION

In conclusion, we can attribute the development of modern day medicine to the practice and use of medicinal herbs. This practice has helped manage families financially which simply implies that it serves as a source of survival for some traditional health practitioners. Trado-medical healers have been secretive about knowledge of herbs used in treatment of ailments in the time past which resulted in loss of some knowledge, methods and the ingredients used in preparation of some of these herbal portions. Nevertheless, proper record of these valuable plants should be kept to serve as baseline for further investigation into qualitative and quantitative analysis of phytochemical properties of these highlighted herbs.

Parameters	Variables	Percentage (%)
Occupation	Herb sellers	51
	Trado-medical Practitioners	32
	Herbalist	17
Age	18-30	13
	31-45	26
	46-64	39
	65 and above	22
Marital Status	Married	57
	Single	18
	Divorced	13
	Widowed	12
Sex	Female	72

 Table1. Demographic Analysis of Respondents



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N(-1- 29	
Male 28	

#### Table2. Common Names, Botanical names and Families of Medicinal Plants

SD

	Common	Yoruba	Botanical	Family	Part	Ailment Cured
	Names	Names	Names		Used	
1					Root,	Rheumatism,
					leave	Malaria, Typhoid,
			Chromolaena	Asteracea	s and	Skin disease,
	Siam weed	Akintola	odorata	е	stem	stomach disorder
2		Mawole	Hippocratea species	Celastrace ae	Root	Typhoid
		Opoto	Ficuscapensi	Moraceae	Bark	Blood tonic
			S			
3						
4		Rira	Detariummic rocarpum	Fabaceae	Bark	Stomach disorder in babies and diarrhoea
	Stinkant	Ifon	Olaxsubscor	Olacaceae	Root	Fontanelle(soft
	forest		pioidea			spot on babies
						head)
5						



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	African	Asala	Plukenetiaco	Euphorbia	leaves	
	Walnut		nophora	ceae		Fontanelle(soft
						spot on babies
						head)
6						
	African	Ejinrin	MomordicaC	Cucurbita	leaves	Diabetes, Pile
	cucumber		harantia	сеае		
7						
	Mango	Mangoro	Mangiferaind	Anarcardi	Bark,	Malaria, Jaundice
			ica	aceae	leave	
					S	
8						
		Osu-igan			Bark	Hypertension
9						
		Asofeyeje	Rauvolfiavo	Аросупас	Bark,	Skin Disease
			mitoria	eae	root	
					and	
					leave	
					S	
10						
	Affrica	Rere	Sennaoccide	Fabaceae	Bark	Typhoid
	coffee		ntalis			
11						
	Lemon grass	Ewe tea	Cymbopoqon	Poaceae	Leave	Maleria fever
			citratus		S	
12						



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	Ginger	Ata-ile	Zingiberoffici	Zingibera	Fruit	Malaria, Sinus
			nale	ceae		
13						
	Hennaplant	Laali	Lawsoniaine	Lythracea	leaves	Malaria, Sinus
			rmis	е		
14						
	Worm seed	Arupale	Dysphaniaa	Amaranth	Root	Arthritis
	plant		mbrosioides	aceae		
15						
	Bitter cola	Orogbo	Garcinia	Clusiacea	Fruit	Erectile
			kola	е		disfunction, Cough
16						
	African n	Abamoda	Bryophyllum	Crassulac	leaves	Stroke
	ever die		pinnatum	eae		
17						
	Pignut	Awogbaaru	Jatrophacurc	Euphorbia	Root	Diabetes
		n	as	сеае		
18						
	Cluster pear	Gbogbonis	Uvariaafzelii	Annonace	Root	Diabetes, Cancer
		e		ae		
19						
	Alligator	Atare	Aframomum	Zingibera	Fruit	Erectile
	pepper		melegueta	ceae		disfunction
20						
	Bitter leaf	Ewuro	Vernoniaamy	Asteracea	leaves	Diabetes,
21			gdalina	е		Hypertension



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	Scent leave	Efinrin	Ocimumgrati	Lamiacea	leaves	Diarrhoea
			ssimum	е		
22						
	Mahogany	Oganwo	Khayaivoren	Meliaceae	Root,	Maleria fever
			sis		leave	
					s and	
					bark	
23						
	Stool wood	Ahun	Alstoniaboon	Apocynac	Leave	Malaria
			ei	eae	s,	
					root	
					and	
					bark	
24						
		Igbesi/	Dennettiatrip	Annonace	Leave	Malaria
		Igberi	etala	ae	s,	
					root	
					and	
					bark	
25						
		Oro	Irvingiagabo	Irvingiace	Bark	Malaria
			nensis	ae		
26						
	African	Awopa	Enantiachlor	Annonace	Bark	Malaria
27	yellow wood		antha	ae		



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## Table3.A list of ailments and number of plants used to cure ailments in Ijebu Ode

Ailments	Number of plants used
	14
Rheumatism	
	10
Malaria	10
	_
	6
Diabetes	
Fontanelle	5
	4
Cancer	
	3
Stomach	
disorder	
	-
Blood Tonic	5
Diarrhea	1
	2
Hypertension	



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Erectile dysfuction	2
Stroke	1
Skin disease	2
Typhoid	3
Pile	1
Arthritis	1
Cough	1
Sinus	2
TOTAL	63



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## **Chart:**





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