



ETHNOBOTANY SURVEY OF MEDICINAL PLANTS USED IN THE TREATMENT OF FIBROID IN OGUN AND OSUN STATES, SOUTHWESTERN, NIGERIA

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ABSTRACT

This study was aimed at documenting information of ethno-botanical survey of plants traditional used as medicine in the treatment of fibroid in Ogun and Osun States, Nigeria. Structured and open-ended questionnaire were administered to respondents for data collection. Multistage sampling technique with a four stage design, simple random and purposive sampling techniques were used for this study. Four and six Local Government Areas were selected purposively from Ogun and Osun States, respectively. A total number of 192 respondents were interviewed; results showed that majority of the respondents were males in Ogun state (72.8%) and Osun state (65.8%). The mean ages of the respondents for Ogun and Osun state were 49.3 years and 50.2 years respectively. Most of the respondents had secondary school education in Ogun (34.6%) and Osun (33.3%) states respectively, while, 71.6% and 64.9% of the traditional healers and herb sellers were Muslims in Ogun and Osun states respectively. A sum of 102 plants species belonging to 49 families were found. Euphorbiaceae had the highest frequency of family species followed by Annonaceae.

Keywords: Ethnobotany, Medicinal plants, Fibroid treatment

INTRODUCTION

Plants have been major sources of medicine and plant secondary metabolite has been attributed for most plants' therapeutic activities (Fabeku, 2006, Neumann and Hirsch, 2000). Ethno-botanical study is an important step in the identification, selection and improvement of the therapeutic agents from medicinal plants (Idowu *et al.*, 2010). Ethno-botany is based on the knowledge of plants by the local people and their usefulness as understood by the people of a particular ethnic group, since information concerning a particular plant varies from one ethnic group to another (Tor-Anyiin *et al.*, 2003; Igoli *et al.*, 2005). According to World Health Organization (WHO), the use of traditional medicine in various therapies by the indigenous population in the world over cannot be overemphasized. About 80% of the world's people depend on traditional medicine for their primary

healthcare needs (Azaizeh *et al.*, 2003). Medical knowledge passed down by the common people constitutes sources of information useful for scientific research and that many plants utilized exclusively in popular tradition, when exposed under scientific examination, have been found to be useful for different sectors in the industry, therefore science and tradition have a strong connection between them, science in fact has often traditional origin (Lentini, 2000).

The documentation and preservation of the indigenous knowledge of traditional medicine becomes imperative due to loss of plant varieties such as deforestation, loss of indigenous knowledge due to erosion of cultural practices, and the limitations of orthodox drugs (side effects and resistance of microorganisms to antibiotics). Herbal remedies used in traditional folk medicine provide an interesting and still largely unexplored source for

creation and development of potentially new drugs (Lindequist *et al.*, 2005). This is essential now because with the current rate of destruction of tropical forest habitats, plant scientists may have little time to survey the plant kingdom for useful or leading compounds (Igoli *et al.*, 2005).

This study, however is aimed at documenting ethno-botanical survey of information's available on traditional plants used in treatment of Fibroid in the study areas.

METHODOLOGY

Study area

The study was conducted in both Ogun and Osun States. Ogun State is situated between Latitudes 6°0'N - 7°15' N and Longitudes 3°20' E and 4° 37'

E. It is located in the South-western Zone of Nigeria with a total land area of 16,409.26 km². It is bounded on the West by the Benin Republic, on the south by Lagos State and the Atlantic Ocean, on the East by Ondo State and on the North by Oyo and Osun States.

While Osun State was created from old Oyo State in August 1991. It is located between latitude 8° 10' N and 6° 5'N and longitude 4° E and 5° 4'E and with land area of 9,251 km². It is bordered in the North by Kwara State, on the South by Ogun State, on the West by Oyo State and on the East by the Ondo State. Osun State has 30 Local Government Areas (LGA) with a total population of 3,423,535 in 2006 census. Total land area under forest cover is 9224 ha.

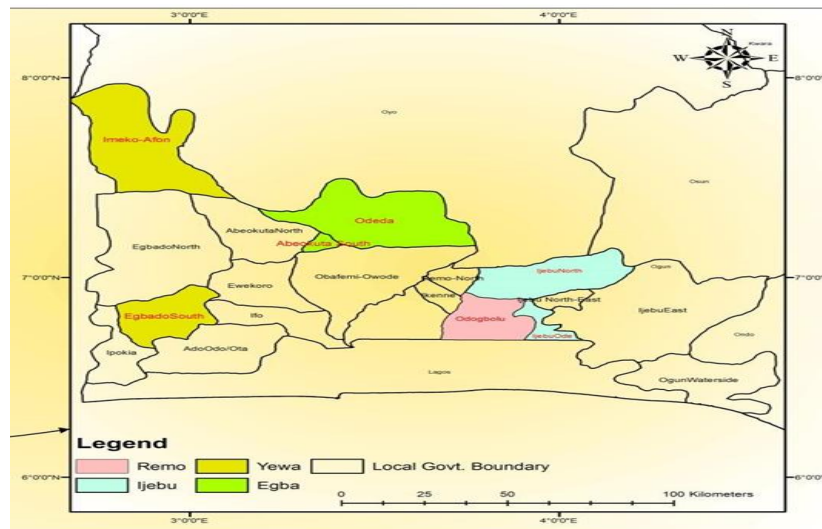


Figure 1: Map of Ogun showing selected Local Government Areas

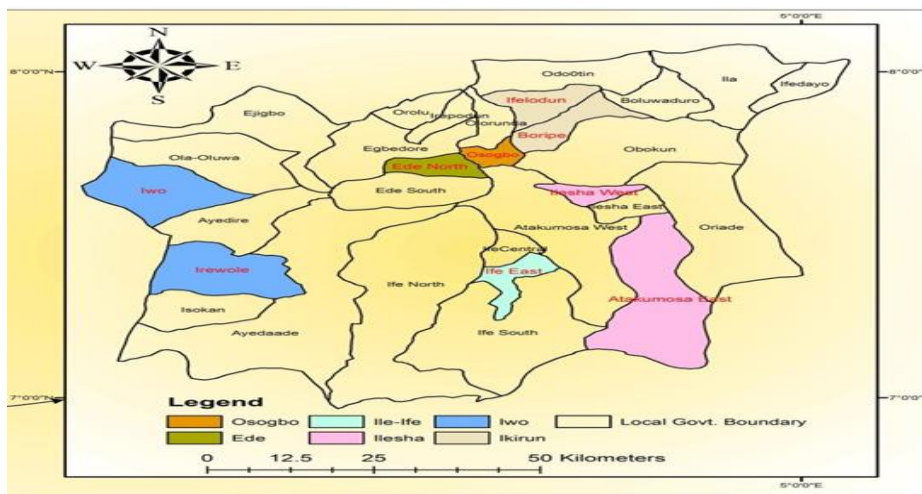


Figure 2: Map of Osun showing selected Local Government Areas

For the purpose of this study, the research data were obtained from primary source with the aid of well-structured questionnaire. Secondary data were also used for the study from previous literature.

Sampling procedure and sample size

A multistage sampling technique with a three (3) stage design was used for this study. Two States (Ogun and Osun) were selected Stage one: was multistage sampling involved the division of Ogun and Osun States into two strata to represent the primary selection units. From each unit, location was purposively selected due to prevalence of Herbs Sellers and Traditional Medical practitioner's business in the areas. Ogun State comprises of 20 LGAs while Osun State comprises of 30 LGAs. In Ogun state, 4 LGAs were selected which include Abeokuta South, Ijebu North, Odeda, Yewa south. In Osun state 6 LGAs were selected which comprised Osogbo, Ifelodun, Ilesha West, Atakunmosa East, Ede North and Boripe. In the second stage, five communities were purposively selected from each LGA. The third stage involved selection of four (4) respondents from each of the communities. A total number of 200 copies of questionnaire were administered. One-hundred and ninety-two respondents were interview.

Data Collection

Data were collected on the socio-economic characteristics of the respondents, medicinal plants used for the treatment of fibroid.

Data Analysis

Descriptive statistics of frequency and percentage were used to analyze the socio-economic characteristics and medicinal plants identified.

RESULTS

Socioeconomic characteristics of the respondents

The respondents' socio-economic characteristics indicated that sex is not a limiting factor in the practice even though the respondents are male dominated with 72.8% and 65.8% as against the female respondents with 27.2% and 34.2% in both Ogun and Osun States respectively (Table 1) which signifies that men were more involved in the treatment of fibroid than the women folks. This showed that trado-medical practice is male dominated as it agrees with the findings of (Oyelakin 2009;

Ajibesin *et al.*, 2011) who reported that traditional medical practices among the Yoruba ethnic group of Nigeria is dominated by the males due to secrecy in practice and transfer of knowledge from generation to generation.

It was also revealed majority of the respondents (44.4%, 31.5%) are between 50-59 years while age group 30-39 years represents the least (8.6%, 11.7%) in Ogun and Osun States respectively. This implies that respondents are in their active and productive age which is in line with (Omonike *et al.*, 2010) who also reported a similar observation in his study. It was further revealed that majority (88.9%, 82.9%) of the respondents were married while few (2.5%, 3.6%) were single.

The three basic religions in Nigeria were observed in the study. In Ogun and Osun States, respectively, majority (71.6%, 64.9%) of the respondents were Muslims, Christian (21.0%, 24.3%) and traditional worshippers (7.4%, 10.8%). This implies that fibroid treatment is not a function of religion but knowledge. The study further indicates that most (56.8%, 58.6%) of the respondents had lived the community for 21-50 years whereas, about 33.3% and 28.8% of the respondents in Ogun and Osun State have been in the community for less than 21 years. This implies that most of the respondents have stayed long enough in his/her communities to have folkloric knowledge on the usage of herbs for treating fibroid. Educationally, 7.2% accounts for adult literacy in Osun State and 2.5% in Ogun State. 16.0% and 20.7% had full primary education, 34.6% and 33.3% completed secondary education, 8.6% and 5.4% had their education up to bachelor degree in both Ogun and Osun States respectively. This is an indication that there is a reasonable level of education among respondents and is in accordance with (Mussema, 2006) who reported that a traditional healer can either be educated or be a layperson with the ability to cure certain ailments. Based on the family type, it was discovered that monogamy was the most (61.7% and 65.8%) practiced type of family in both states. But Ogun are more polygenic than Osun state and held a high implication for availability of household labor. From the study, traditional healers dominated (81.5% and 68.5%) the study areas while herb sellers were 14.8% and 21.6% in Ogun and Osun State respectively. This implied that more traditional

medical practitioners are involved in treatment of fibroid as compared to herb sellers.

Table 1: Socio economic characteristics of respondents in Ogun and Osun States respectively

Variables	Ogun state		Osun State	
	Frequency	Percentage	Frequency	Percentage
Gender				
Male	59	72.8	73	65.8
Female	22	27.2	38	34.2
Total	81	100	111	100
Age (Years)				
30-39	7	8.6	13	11.7
40-49	31	38.3	37	33.3
50-59	36	44.4	35	31.5
60>	7	8.6	26	23.4
Total	81	100	111	100
Marital Status				
Single	2	2.5	4	3.6
Married	72	88.9	92	82.9
Separated	1	1.2	8	7.2
Divorced	0	0.0	1	0.9
Widow/ Widower	6	7.4	6	5.4
Total	81	100	111	100
Religion				
Christianity	17	21.0	27	24.3
Muslim	58	71.6	72	64.9
Traditional	6	7.4	12	10.8
Total	81	100	111	100
Education Qualifications				
Adult Literacy	2	2.5	8	7.2
Incomplete Primary	4	4.9	8	7.2
Full Primary	13	16.0	23	20.7
Incomplete Secondary	6	7.4	3	2.7
Complete Secondary	28	34.6	37	33.3
Grade II/Technical	7	8.6	9	8.1
Diploma/OND	10	12.3	8	7.2
NCE/ Nursing	3	3.7	4	3.6
HND /Bachelor Degree	7	8.6	6	5.4

Master's Degree	1	1.2	5	4.5
Total	81	100	111	100
Family Type				
Monogamy	50	61.7	73	65.8
Polygamy	31	38.3	38	34.2
Total	81	100	111	100
Occupation				
Herb Seller	12	14.8	24	21.6
Herbal Healer	1	1.2	5	4.5
Herbalist	2	2.5	6	5.4
Traditional Healer	66	81.5	76	68.5
Total	81	100	111	100

Identification of the Medicinal Plants species used for the traditional treatment of fibroid in Ogun and Osun States.

One hundred and two plants species belonging to forty-nine families comprising of trees species (55), shrub (22), herbs (20), climber (7), creeper (1), underground stem (3), of medicinal plants were identified from the information provided by the Traditional herbal healer, herb seller and herbalist (Table 2). The results also showed that Euphorbiaceae family had the highest frequency of species followed by family Annonaceae, the families of Leguminosae, Loganiaceae, and Musaceae. The plants species, local name in Yoruba, parts of the plants used, method of preparation, dosage of the drug, duration of drug administration (Table 3) and shelf-life of the herbs are documented.

A total of 16 different recipes and the traditional methods of preparation were documented. The plants parts usually used for the fibroid treatment includes the plant root, bark, leaves, fruits, seeds, extracted juices from the fruits, bulb. Leaves have the highest frequencies plants part used for the preparation of fibroid treatment in both Ogun and Osun States. Similar trend was also reported by (Ogungbenro, *et al.*, 2018) different parts of plants such as leaves, bark, root, fruits are used for the preparation of blood-cleansing herbs in Oyo and Ogun States, Nigeria. The method of preparations includes soak, decoction, infusion, pyrolysis, fermentation, cook or fry and pound and air dried. Most of the plants were prepared from the combination of more than one plant parts. Few herbs preparation was made from single plant.

Table 2: List of plants used by Traditional medical practitioners in the used of fibroid Treatment Ogun and Osun States.

S/No	Scientific Name	Family Name	Local Name (Yoruba)	Parts of plant used	Plant type
1	<i>Abrus precatorius</i> Linn.	Leguminosae	Ojú-ẹyẹ/Omisinmisin	Leaves, Fruits	Climber
2	<i>Acacia ataxacantha</i> DC.	Fabaceae	Bòdóní	Bark	Tree
3	<i>Adansonia digitate</i> Linn.	Bombacaceae	Oşè	Bark	Tree
4	<i>Lagenaria breviflora</i> (Benth.) Roberty	Cucurbitaceae	Tagiri	Fruits	Tree
5	<i>Aframomum melegueta</i> (Roscoe)K. Schum.	Zingiberaceae	Ataare	Fruits	Shrub
6	<i>Alchornea laxiflora</i> (Benth.) Pax. & K.Hoffn	Euphorbiaceae	Ọrọ pẹpẹ	Root,Fruits	Shrub
7	<i>Allium ascalonicum</i> Linn.	Alliaceae	Àlùbósa elewe	Leaves	Underground stem
8	<i>Allium sativum</i> Linn.	Alliaceae	Áyù	Bulb	Underground stem
9	<i>Allium cepa</i> Linn.	Alliaceae	Àlùbósa onisu	Bulb	Underground stem
10	<i>Anchomanes difformis</i> (Bl.) Engl.	Araceae	Ògiri sákó	Root	Tree
11	<i>Annona muricata</i>	Loganiaceae	Sour sop	Leaves	Tree
12	<i>Anthocleista djalonensis</i> A. Chev.	Aristolochiaceae	Şápó	Bark/root	Tree
13	<i>Aristolochia repens</i> Mill.	Meliaceae	Akọgùn	Root	Climber
14	<i>Azadirachta indica</i> A. Juss.	Meliaceae	Dogonyaro	Bark/Leaves/Root	Tree
15	<i>Baissea axillaris</i> (Benth.) Hua	Apocynaceae	Imù rílá	Bark	Tree
16	<i>Bidens pilosa</i> Linn.	Asteraceae	Akísán	Leaves	Herb
17	<i>Blighia sapida</i> Konig.	Euphorbiaceae	Igi isin	Bark	Tree
18	<i>Bridelia ferruginea</i> Benth.	Euphorbiaceae	Irà	Bark, Leaves	Tree
19	<i>Byrsocarpus coccineus</i> Schum &Thonn.	Fabaceae	Àdó	Leaves, Root	Herb
20	<i>Calliandra haematocephala</i> Hassk.	Leguminaceae	Tude	Bark	Tree
21	<i>Capsicum annum</i> Linn.	Solanaceae	Ata jòsì ojo	Root	Herb
22	<i>Carica papaya</i> Linn.	Caricaceae	Ìbèpẹ/ Ìsírígùn	Fruits	Tree
23	<i>Chenopodium ambrosioides</i> Linn.	Chenopodiaceae	Gbogbonişe	Root	Tree
24	<i>Cissampelos owariensis</i> P.Beauv.ex DC	Menispermaceae	Jenjoko	Leaves	Climber
25	<i>Citrullus lanatus</i> (Thunb.) Matsum. & Nakai	Cucurbitaceae	Bààrà	Fruit	creeper

S/No.	Scientific Name	Family Name	Local Name (Yoruba)	Parts of plant used	Plant type
26	<i>Citrus aurantiflora</i> (Christm.) Swingle	Rutaceae	Ọsàn-wẹwẹ	Fruit/Leaves/Juice	Tree
27	<i>Citrus medica</i> var <i>limonum</i>	Rutaceae	Ọsàn janganin	Fruits	Tree
28	<i>Clausena anisata</i> (Willd.) Benth.	Rutaceae	Agbasá	Root	Tree
29	<i>Cocos nucifera</i> Linn.	Arecaceae	Agbọn	Root	Tree
30	<i>Cola millenii</i> K.Schum.	Sterculiaceae	Obì ẹdun	Bark	Tree
31	<i>Cola nitida</i> (Venth.) Schott & Endl.	Sterculiaceae	Obì obifin	Bark	Tree
32	<i>Corchorus oltorus</i> . Linn.	Tiliaceae	Ewédú	Leaves	Herb
33	<i>Croton zambesicus</i> Muell. Arg.	Hypoxidaceae	Àjẹkòbàlé	Root	Herb
34	<i>Curculigo pilosa</i> (Schum. & Thonn.) Engl.	Hypoxidaceae	Ẹpakún	Fruits, Root	Rhizome
35	<i>Cylicodiscus gabunensis</i> Harms	Hypoxidaceae	Ọlọsan	Root	Tree
36	<i>Cynometra megalophylla</i> Harms	Caesalpinoideae	Ata	Seed	Herb
37	<i>Dioclea reflexa</i> (Hook.) f.	Dioscoriaceae	Agbaarin	Bark, fruits, seed	Herb
38	<i>Dioscorea dumetorum</i>	Dioscoriaceae	Ẹsúúrú pupa	Bulb	Climber
39	<i>Elaeis guineensis</i> Jacq.	Palmae	Ọpẹ	Fruits, leaves, Bark	Tree
40	<i>Euphorbia hirta</i> Linn.	Euphorbiaceae	Ọrọ-agogo	Bark	Shrub
41	<i>Euphorbia lateriflora</i> Schum. & Thonn.	Euphorbiaceae	Ẹnuopiri	Fruits	Shrub
42	<i>Euphorbia poissoni</i> (Pax)	Euphorbiaceae	Ọrọ adẹtẹ	Leaves	Herb
43	<i>Ficus exasperata</i> Linn.	Moraceae	Eépín	Leaves	Tree
44	<i>Garcinia kola</i>	Clusiaceae	Orógbó	Seed/pod	Shrub
45	<i>Gladiolus daleni</i> van Geel	Iridaceae	Bàkà	Bulb	Herb
46	<i>Globimetula braumii</i> (Engl.) van Tiegh	Euphorbiaceae	Àfòmọ	Leaves	Climber
47	<i>Gossypium arboreum</i>	Malvaceae	Òwú	Leaves	Shrub
48	<i>Heliotropum indica</i> Linn.	Boraginaceae	Àtaṅparí òbúko	Bark, Root	Herb
49	<i>Icacina triacantha</i> Oliv.	Dioscoriaceae	Isu gbégbé	Tuber	Shrub
50	<i>Ipomoea heterotricha</i> F. Didr.	Convolvulaceae	Jẹminhoo	Bark, Root	Tree
51	<i>Jatropha curcas</i> Linn.	Euphorbiaceae	Bòtuje	Leaves	Shrub
52	<i>Khaya grandifoliola</i> (Welw) CDC	Meliaceae	Òganwo	Bark	Tree
53	<i>Kigelia africana</i> (Lam.) Benth	Bignoniaceae	Pandoro	bark, fruits	Tree/Shrub

S/No	Scientific Name	Family Name	Local Name (Yoruba)	Parts of plant used	Plant type
54	<i>Lantana camara</i> Linn.	Verbenaceae	Ẹwọn àgogo	Fruits	Tree/shrub
55	<i>Launaea taraxacifolia</i> (Willd.) Amin <i>Ms ex C. Jeffrey</i>	Asteraceae	Ẹfọ Yanrin	Leaves	Herb
56	<i>Leersia hexandra</i>	Leguminaceae	Abèèrè	Seed/Fruits	Tree
57	<i>Lonchocarpus cyanescens</i> (Schumach) Benth.	Leguminaceae	Ẹlú	Root	Tree
58	<i>Lophira alata</i>	Ochnaceae	Egbò owó	Leaves, Bark	Tree
59	<i>Macaranga barteri</i>	Euphorbiaceae	Àgbósá	Leaves	Tree
60	<i>Mamordica cabraei</i> (Cogn) C. Jeffery	Cucurbitaceae	Ahàrà	Leaves	Tree
61	<i>Mikania carteri</i>	Asteraceae	Iyáwé	Leaves	Tree
62	<i>Milicia excelsa</i> (welw.) C.C Berg	Moraceae	Ìrókò	Bark	Tree
63	<i>Mimosa pigra</i> Linn.	Leguminosae	Ẹwọn àgogo	Root	Shrub
64	<i>Mimosa pudica</i> Linn.	Mimosoideae	Patanmọ	Leaves	Herb
65	<i>Mondia whitei</i>	Periplocaceae	Ìsírìgùn	Fruits	Shrub
66	<i>Morus mesozygia</i>	Moraceae	Ayee	bark, fruits	Tree
67	<i>Musa nana</i>	Musaceae	Ọgẹdẹ Ọmìnì	Fruits	Herb
68	<i>Musa paradisiaca</i> L.	Musaceae	Ọgẹdẹ àgbagbà	Fruits	Herb
69	<i>Musa sapientum</i>	Musaceae	Ọgẹdẹ Pàràntà/wẹwẹ	Fruits	Herb
70	<i>Musanga cecropioides</i>	Musaceae	Ifun inu igi aga	Bark	Tree
71	<i>Newbouldia laevis</i> (P. Beauv) <i>Seemann ex. Bureau</i>	Bignoniaceae	Akòko	Leaves, bark	Tree
72	<i>Nicotiana rustica</i>	Bignoniaceae	Ewé kátábà	Leaves	Shrub
73	<i>Nicotiana tabacum</i> Linn.	Bignoniaceae	Ewé taba	Leaves	Shrub
74	<i>Olox subscorpioidea</i> Oliv.	Olacaceae	Ifọn	Bark	Shrub/Tree
75	<i>Palisota hirsuta</i> (Thunb.) K. Schum.	Commelinaceae	Àkèrèjùpon	Bark	Herb

S/No	Scientific Name	Family Name	Local Name(Yoruba)	Parts of plant used	Plant type
76	<i>Perquetina nigrescens</i> (Afzel.)Bullock	Apocynaceae	Ogbo	leaves, bark	Tree
77	<i>Piper guineense</i> Schumach.and Thonn.	Piperaceae	Ìyèré	Fruits	Tree
78	<i>Plumbago zeylanica</i> L.	Plumbaginaceae	Ìnabìrì	Bark	Tree
79	<i>Pseudo spondiasmicrocarpa</i> (A.Rich.)Engl.Var.	Meliaceae	Ewé Ekaja	Leaves	Tree
80	<i>Pycnanthus angoiensis</i>	Myristicaceae	Igi Àkọmu	Bark	Tree
81	<i>Ricinus communis</i>	Euphorbiaceae	Lààrà	Leaves, oil	Shrub
82	<i>Saccharum officinarum</i>	Graminae	Ìrèké	Rhizome	Rhizome
83	<i>Sarcocephalus latifolis</i> (Sm.)Bruce	Rubiaceae	Egbeṣi	Root	Shrub/Tree
84	<i>Secamone afzelii</i> (Schultes) K. Schum.	Asclepiadaceae	Àilu	Leaves	Climber
85	<i>Securidaca zeylanica</i> L.	Plumbaginaceae	Ìpẹta	Bark	Tree
86	<i>Senna alata</i> (Linn.) Roxb.	Leguminosae	Àsunwọn	Leaves	Shrub/Tree
87	<i>Solenostemon monostachyus</i>	Labiatae	Olonjogbodu-gbudu	Leaves	Herb
88	<i>Spondias mombin</i> Linn.	Anacardiaceae	Ìyeye	Leaves	Tree
89	<i>Strophantus gratus</i>	Apocynaceae	Iṣa	Root	Tree
90	<i>Tetrapleura tetraptera</i> (Taub)	Fabaceae	Aidan	Fruits	Tree
91	<i>Triumfetta rhomboidea</i> Jacq.	Tiliaceae	Akeeri	leaves, bark	Shrub
92	<i>Urania picta</i> (Jacq.) DC	Leguminosae	Àlùpàyídà	Leaves	Shrub
93	<i>Urena lobata</i> Linn.	Malvaceae	Akeeri	Leaves	Herb
94	<i>Usteria guineensis</i> Willd	Loganiaceae	Èsi ilẹ	Leaves	Climber
95	<i>Uvaria afzelli</i>	Annonaceae	Gbogbonise	Root	Tree
96	<i>Uvaria chamae</i> P. Beauv.	Annonaceae	Èrùjù	Root, Bark	Herb
97	<i>Vitellaria paradoxa</i> Gaertn. f.	Sapotaceae	Èmi	Bark	Tree
98	<i>Volvariella esculenta</i>	Loganiaceae	Ijù ope	Fruits	Tree
99	<i>Xylopi aethiopica</i> (Dunal) A. Rich.	Annonaceae	Èrù	Fruits	Tree
100	<i>Xylopi villosa</i> chip,	Annonaceae	Èru àwọnká	Seed/pod	Tree
101	<i>Zea mays</i> Linn.	Poaceae	Àgbàdo	Flower	Shrub
102	<i>Zingiber officinale</i>	Piperaceae	Ata-ilẹ	Rhizome	Shrub

Table 3: Recipes and the traditional methods of preparing some of the medicinal plants for the treatment of fibroid in Ogun and Osun States.

S/ No.	Plants	Local name (Yoruba)	Parts of plant used	Method of plant preparation	Dosage	Duration (Days)	Shelf-life (Days)
1	<i>Xylopiya aethiopica</i> (Dunal) A. Rich. <i>Cocos nucifera</i> Linn	Eeru Coconut	Seed/ pod Root	Cut the materials in pieces and measure the two equally, soak with water for 3 days.	½ of a tea cup daily	90-100	10
2	<i>Dioclea reflexa</i> Hook. F. <i>Sida pilosa ifolia</i>	Agbaarin (2) Ewe ti won yo sile lara ile	Seed Leaves	Grind and soak with local alcohol	¼ teaspoon	90	20
3	<i>Kigelia africana</i> (Lam.) <i>Ricinus communis</i> <i>Newbouldia laevis</i> (P. Beauv.) Seemann Bureau <i>Pseudospondiasmicrocarpa</i> (A.Rich.)Engl. Var	Igi amuyan/ Lara Akoko Ekaja	Bark Fruits Leaves Leaves	Soak with fermented maize water add table salt	1 tea cup	90	10
4	<i>Macaranga barteri</i>	Agbosa	Leaves	Grind and soak with local alcohol	4 tea spoon daily	30	20
5	<i>Xylopiya aethiopica</i> (Dunal) A. Rich.	Igi ibin Eru	Bark Seed	Soak with dry gin for 12-24hrs. decant	1 shot cup twice daily	30	30
6	<i>Palisota hirsuta</i> (Thunb.) K. Schum. <i>Olax subscorpioidea</i> Oliv. <i>Heliotropum indica</i> Linn.	Akeretupon Ifon Atapariobuko	Bark Bark Bark	Cut in pieces and Boil with water	1 tea cup daily	60	14
7	<i>Desmodium velutinum</i> <i>Uvaria chamae</i> <i>Xylopiya aethiopica</i> (Dunal) A. Rich.	Emo berodefe Iju igi Eru	Leaves Bark Seed	Soak with water. Decant after 3 days	1 tea cup daily	90	14
8	<i>Trona</i> <i>Citrus aurantiflora</i> (Christm.) Swingle	Kahun bilala Osan wewe		Grind the potash. Pour the grinded potash in the lime juice.	4 tea spoon daily	30	30
9	<i>Elaeis guineansis</i>	Ekuro (25)	Seed	Eat 25 every morning	25pieces		
10	<i>Azadirachta indica</i> A. Juss	Dogoyaro	Bark, leaves, Root	Boil the three parts with water for 5minutes, start taking after 3 days	One tea/glass cup. Morning & night	60	7

Table 3: Recipes and the traditional methods of preparing some of the medicinal plants for the treatment of fibroid in Ogun and Osun States. Cont'd

S/No.	Plants	Local name	Parts of plant used	Method of plant preparation	Dosage	Duration (Days)	Shelf-life (Days)
11	<i>Aristolochia repens</i> Mill	Akogun	Root	Heat all the materials. Take with lime juice or local alcohol	One teaspoonful 3-3 days	100	60
	<i>Citrullus lanatus</i> (Thunb.) Matsum. & Nakai	Igbeta	Root				
	<i>Gladiolus daleni</i> van Geel	Bara					
	<i>Trona</i>	Alubosa baka					
	<i>Mondia whitei</i>	Kahun bilala	Root				
	<i>Curculigo pilosa</i> (Schum. & Thonn.)Engl.	Isirigun	Root				
12	<i>Heliotropum indica</i> Linn.	Atapariobuko	Root	Burn together with local black soap take with local alcohol	4 teaspoons every morning	60	21
	<i>Carica papaya</i> Linn.	Ako ibepe	Root				
13	<i>Trona</i>	Kahun bilala		Cut into pieces and pound together, sieves. Take with local alcohol	4 teaspoons daily	100	30
13	<i>Musa nana</i>	Ogede wewe	Fruits				
	<i>Senna alata</i> (Linn.) Roxb.	Asunwun	Leaves				
	<i>Jatropha curcas</i> Linn.	Igi botuje	Bark				
14	<i>Solanun aethiopicum</i>	Igi osun	Bark	Boil with fermented maize water	One tea cup everything	60	10
	<i>Volvarieella esculenta</i>	Olu iju					
	<i>Jatropha curcas</i> L.,	Botuje	Root				
	<i>Microdesmis puberula</i>	Ako osunsun	Root				
	<i>Xylophia villosa</i> Chip,	Eru awonka					
15	<i>Trona</i>	Kahun bilala	Pod				
	<i>Baissea axillaris</i>	Imu nla					
15	<i>Blighia sapida</i> Konig	Igi isin	Bark	Soak with local alcohol for 3 days	4 teaspoons daily	90	60
16	<i>Xylophia aethiopica</i> (Dunal) A. Rich.	Eru	Seed				
	<i>Kigelia africana</i> (Lam.) Benth	Igi pandoro /	Bark	Boil with fermented maize water (omidun)	One tea cup daily	60	10
	<i>Citrullus lanatus</i> (Thunb.) Matsum. & Nakai	Pandoro	Fruits				
	<i>Allium ascalonicum</i> Linn	Bara					
	<i>Mondia whitei</i>	Alubosa	Tuber				
	<i>Xylophia aethiopica</i> (Dunal) A. Rich.	Isirigun	Fruits				
	<i>Piper guineense</i> Schumach. & Thonn.	Eru	Pod				
	<i>Tetrapleura tetraptera</i> (Taub)	Iyere	Fruits				
		Adian	Fruits				

DISCUSSION

Based on the findings Trado-medical practice is male dominated as it agrees with the findings of (Oyelakin 2009; Ajibesin *et al.*, 2011) who reported that traditional medical practices among the Yoruba ethnic group of Nigeria is dominated by the males due to secrecy in practice and transfer of knowledge from generation to generation. The result also shows that respondents are in their active and productive age which is in line with (Omonike *et al.*, 2010) who also reported a similar observation in his study. Majority of the respondents reported to be educated is an indication that there is a reasonable level of education among traditional medical practitioners and is in accordance with Mussema (2006) who reported that a traditional healer can either be educated or be a layperson with the ability to cure certain ailments. Further result also showed that Euphorbiaceae family had the highest frequency of species followed by family Annonaceae, Leguminosae, Loganiaceae, and Musaceae. There were various recipe and traditional methods of preparation. The plants parts usually used for the fibroid treatment includes the plant

root, bark, leaves, fruits, seeds, extracted juices from the fruits, bulb. Leaves have the highest frequencies plants part used for the preparation of fibroid treatment as observed in both Ogun and Osun States. This is similar to Ogungbenro *et al.*, (2018) who also revealed that different parts of plants such as leaves, bark, root, fruits are used for the preparation of blood-cleansing herbs in Oyo and Ogun States, Nigeria.

CONCLUSION

This study revealed that men have more information about fibroid treatment than the women folk. Different plants species were used for treatment of fibroid in the study areas Euphorbiaceae had the highest frequency of family species used. There is need for proper documentation on medicinal plants used which is at verge of disappearance due to the loss of older generations resulting in knowledge gap and death of information and sustainable utilization of plants.

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