SURVEY OF MEDICINAL PLANTS USED IN CHANCHANJI DISTRICT OF TAKUM LOCAL GOVERNMENT AREA OF TARABA STATE, NIGERIA

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Abstract
An ethnobotanical survey of medicinal plants of the Chanchanji District of Takum Local government Area of Taraba State, Nigeria is reported for the first time and their uses and medicinal potentials documented. The survey revealed fifty (50) easily available in the area and commonly used plants species representing thirty four (34) families. These plants are used in treating various pathological diseases such as dysentery, yellow fever, wounds, typhoid, stomach ulcers, jaundice, skin infection etc. The survey presents unique medicinal applications of some common African medicinal plants and also reveals the valuable ethno pharmacological knowledge of the people of Chanchanji district.

Keywords: *Medicinal plants, ethnobotanical survey, Chanchanji district, Nigeria.*

Introduction

According to estimate by World Health Organization (WHO, 1978), about 70% of the population of developing countries relies primarily on traditional medicine for their health care needs (Wembebe, 1999). The most widely used components of traditional medicine is herbal preparations.

Gamaniel (2000) noted that the plant kingdom has long served as prolific source of drugs, foods, additives, flavouring agents, colourants, binders and lubricants. Infact it is estimated that about 25% of all prescribed medicines today are substances derived from plants.

As at today, all over the world, several ethnobotanical studies focusing on medicinal plants have been documented (Wang *et al.,* 2002; Kumar *et al.*, 2005). However, Gill (1992) reported that in Nigeria very little information about ethnobotanical studies has been documented; this statement is collaborated by Sofowora (1993).

Many plants are used in African continent for the treatment of different diseases such as fever, dysentery, cholera, diarrhea, etc. and others which are typical diseases of tropical country (Ayogu and Amachi, 2009; Ajayi and Akintola, 2010).

Also Okpuzor, *et al.* (2008) reported that two third of the world population (mainly in developing countries) rely entirely on traditional medical therapies as their primary form of health care.

It is pertinent to note here that Chanchanji district is mostly rural with no immediate access to modern health-care facilities. These people thus resort to herbal remedies to cure many ailments and since there has been no report of ethnobotanical studies carried out in this area, this study is therefore of much relevance.

Materials and Methods Study area:

Chanchanji village is the headquarters of Chanchanji district and is located between Wukari and Takum. It is 45km away from Wukari and 32km to Takum and has a land mass of 1,791sqkm(Taraba State Diary, 2000). The research was carried out in eight villages that comprise part of the district namely; Peva, Chanchanji, Sabe, Demevaa, Adu, Shinku, Tyoalumun and Amadu.

Methods

Plants collection and authentication: The plant materials were collected between the month of March and July, 2012. The information about the plants was gathered during field trips through oral interviews with the local herbalist and herb users. The plants in which information were in agreement in at least five out of the eight villages were retained for the purpose of this documentation.

Consequently, fifty (50) plants species from thirty four (34) botanical families traditionally used to treat some ailments common to the locality were collected.

All the species collected were identified and authenticated by MallamI.A Kareem of Federal College of Forestry, Jos. Each plant species was given a batch number and presented in two albums, one deposited in Herbarium of the Federal College of Forestry, Jos and the other with the Department of Chemistry, University of Jos.

Results and Discussion

This study identified fifty (50) plants species belonging to thirty four (34) botanical families which are used traditionally as phytomedicines by natives. The plants were used for treatment of ailments such as dysentery, yellow fever, wounds, typhoid, stomach ulcers, etc.

Table 1 shows the list of plant species, botanical name, local name(s), uses, parts used. Most of these plants grow wild except few that are cultivated by the people themselves.

Out of the 34 botanical families which the people use as medicines, the family Caesalpiniaceae had the largest number of species (four), followed by moraceae (three) while the rest had either two or one species, (Table 2).

Table 3 shows the number of respondents during the field work.i.e herbalists and herbal plant users who were interviewed.

Indeed, this study has revealed that traditional medicinal practice has wide acceptability among the people of Chanchanji district. This is probably as a result of their belief in the efficacy of herbal medicines and also due to the lack of access to modern health facilities. The unavailability and non-affordability of orthodox drugs may have made these people to have preference for traditional medicines as against orthodox medicines. The medicinal uses of the plants are varied just as the plants parts which range from leaves, bark, stem, roots, which are used as single therapy or a combination of two or more species.

Some of the plants used for the treatment of stomach ulcers are *Cissusadenocanlis, Philiostigmathoningii, Gymnosphoriasenegalensis,* and grinded leaves of *Sesbaniasesban.* These plants were either used singly or in combination. Kwashiorkor was also treated using *Annonasenegalensis.*

Critical conditions like Hemorroidswere treated using *Newboaldialavis,* leaves of *Carica papaya,* decoction of the leaves of *Ximeniaamericanum,* decoction of leaves of *Eucalyptus camanldulensis.*

Hysteria was treated using the decoction of leaves of *Ceibapentandra*and *Musa sapientum.* Coughs were treated using plants like *Daniellaoliveri, Lophiralanceolota* and *Terminaliaavicenioides.* Decoction of the leaves of these plants was used. Induced abortion is affected using the decoction of the roots of *Carica papaya.* Yellow feveris treated using various plants like *Chrysanthelumamericanum, Lapinathusdedonefoliris, Azadiracthaindica, Fiscussyncomorus, Fiscusthoningii* and *Lophiralanceolata.* The leaves of *Veroniaamygdalina* and *Borronaverticillata*were used for the treatment of eczema.

The people of this locality used*Phyllantusamarus*and*Stellaria media* to cure arthritis/rheumatism, while they equally used*Asparagus africana,* juice from the fruits of *Gmelinaarborea*to treat ring worm. Dislocation was treated using the stem bark of *Khayasenegalensis. Prosopisafricana*and *Cassia obovata*were used as sexual stimulants.

To stop vomiting, these people soak the trunk of *Fiscuspolita*in water and take. A serious case like epilepsy was treated using a decoction of the leaves of *Moringaoleifera,* while the leaves of both *Borhaanadiffusa* and *Gwerwiamollus*were used to treat withlow. Infusion of the stem of *Erythrinasenegalensis*was used to treat convulsion in children. A decoction of the stem bark of *Butyrospermumparkii*was used to treat dysentery. The people use a decoction of the leaves of *Schwenkiaamericana*as worm expellant while the flowers and leaves of *Daturastramonum* collectively were used as eye drops to cure eye diseases. A decoction of the leaves of *Balanitesaegyptica* was used to arrest constipation.

The result of this work is in agreement with the results of other works done before, and there is no significant difference. Infact, even the oral interviews conducted by the authors in other locations in the state and neighbouring Benue State indicated that these plants are been used for the treatment of the ailments indicated in the main work.

Conclusion and Recommendation:

From the ethnobotanical studies carried out in this area, it is affirmed that the generality of these people has accepted ethno-medicinal practices. According to the respondents, these practices have been transmitted from their ancestors unaltered. This practice is likely to persist for some time to come, if properly documented and the plants are conserved. It is therefore pertinent to suggest here that Government should make deliberate efforts to conserve these plants in conjunction with the Community. The findings of this study will form the basis for further phytochemical pharmacological studies.

Table 1: Ethno Medicinal Information on Herbs Used in Chanchanji District.

Botanical name (family), Local name and voucher number	Plant part(s) used/mode of administration	Disease(s)/ailment(s)
Cissusadenocaulis(Guills&perr) (Ampelidaceae) Hausa-'Ayana' FCFH/030	Whole plant - decoction of the whole plant	Stomach ulcers
Mangiferaindica(Linn) (Ampelidaceae) Hausa-'Mango' FCFH/001	Stem bark/leaves – decoction of the parts.	Malaria fever
Annonasenegalensis(Pers) (Annonacae). Tiv-AhurFCFH/002	Stem bark – infusion of the second layer	Kwashiorkor
Voacangaafricana(Stap6) (Apocymaceae). 'Kokonbiri', 'Amako'.FCFH/015	Roots – decoction	Malaria fever
Newbouldialaevis(seems) (Bignoniaceae) 'Aduruku' – FCFH/037	Leaves decoction	Hemorrhoids
Ceibapentandra(Linn) Gartn. (Bombacaceae)- 'Vambe'- FCFH/038	Decoction of leaves/stem bark	Hysteria
Cassia occidentacis(Linn) (Caesalpiniceae). 'Kuwandyar'- FCFH/029	Leaves used for dressing of wounds. Decoction of roots	Wounds/Purgative
Cassia siamea(Lam) (Caesalpiniacae) 'Akachia' FCFH/049	Leaves decoction	Typhoid fever

Daniellaolieveri(Rolf) (Caesalpiniacae) 'Iya' FCFH/023	Growing parts of the leaves made into balls and squeezed to get the liquid	Coughs
Piliostigmathoningii(Schum) 'Kaego' (Caesalpiniaceae) 'Abafe' – FCFH/007	Leaves decoction	Stomach troubles
Carica papaya (Linn) (Caricaceae) 'Gwanda' FCFH/008	Leaves decoction for hemorrhoids. A decoction of roots for abortion	Hemorrhoids/Induced abortion
Gymnosporiasenegalensis(Loss) (Celatraceal) 'Namijintsada' FCFH/024	Decoction of leaves, stem bark and roots	Dysentery/stomach troubles
Terminaliaaviceniodes(Guills&Perr) (Combretaceae) 'Kuegh' FCFH/006	Growing parts of leaves made into balls and juice squeezed out and taken. Decoction of roots	Coughs and Jaundice
Chrystanthelumamericananum(L. Vatker) (Compositae) 'Santa-Kole' FCFH/046	Leaves/whole plants grinded with pepper and eaten	Jaundice
Veronica amygdalina(Dal) (Compositae) 'Shuwaka' FCFH/018	Leaves rubbed over affected parts	Eczema
Euphorbia hirta(Linn) (Euphorbiaceae) 'Nonon- Kirshiya' FCFH/032	Milky juice applies to the affected parts	Fresh wounds
Phyllantusamarus(L) (Euphorbiaceae) 'EyinOlobe' FCFH/014	Infusion of the plant	Arthritis/Rheumatism
Cassia obovata(Collod) (Leguminosae) 'Filasko' FCFH/027	Grinded leaves	Ulcers/burns
Ocimiumamericanum(Linn) (Libiate) 'Daidoya' FCFH/035	Leaves squeezed and rubbed on the forehead	Catarrh/Headache
Ocimiumviride(Wild-Holl) (Labiate) 'Efurini' FCFH/034	Fresh leaves squeezed and rubbed on the forehead	Sore throat
Asparagus africana(Lam) (Liciaceae) 'Kayanbera' FCFH/016	Roots – infusion	Ring worm
Aloe vera(Mills) (Liliacaea) FCFH/045	Leaves- juice	Boils, sore eyes
Loranthusspp(Linn) (Loranthaceae) 'Anyon-nyia' FCFH/044	Leaves - grinded and eaten	Jaundice
Azadirachtaindica(A. Juss) (Meliaceae) 'Dogon-Yaro' FCFH/004	Leaves -decoction	Yellow fever
Khayasenegalensis(Desr) A. Juss (Meliaceae) 'Madaci' FCFH/013	Stem bark – grinded and covered on the affected parts	Dislocation
Parkiabiglobosa(Jacq) Benth (Mimosaceae) 'Doruwa' FCFH/019	Stem bark – grinded	Wound
Prosopisafricana(Guill&Perr) (Mimosaceae) 'Kohi' FCFH/026	Stem bark – decoction	Sexual stimulation
Fiscussyncomonus(Linn) (Moraceae) 'Abogor' FCFH/005	Leaves- decoction	Jaundice
Fiscuspolita(Vahl). (Moraceae) 'Durmi' 'Kondam'FCFH/012	Trunk- infusion	Vomiting

Fiscusthoningii (blueme) (Moraceae) 'Chediya', 'Akinde' FCFH/047	Leaves- decoction	Jaundice
Moringaoleifera(Lam) (moringaceae) 'Zogale'	Leaves cooked as soup Leaves- grounded Roots- decoction	Typhoid fever, Gonorrhea ,cough, Epilepsy, asthma, back pain.
Musa sapientum(Linn) (musaceae) 'Ayaba' FCFH/039	Leaves – decoction	Malaria fever
Psidiumguajava(Linn) (myrtaceae) 'Goba', 'Gwaver' FCFH/003	Leaves/branches – decoction	Malaria fever
Boerhaaviadiffusa(Linn) (Nyctaginaceae) 'Ingbilayongo' FCFH/042	Leaves – grinded	Whitlow
Lophiralanceolata(Van Teighexkeay) (Ochnaceae) 'Mijinkadai' FCFH/021	Leaves - decoction	Yellow fever
Ximeniaamaricana(Linn) (Olaceae) 'Tsada', 'Chabbuli' FCFH/009	Leaves – decoction used for bathing	Prickly heat Hemorrhoids
Erythrinasenegalensis(DC) (papilinaceae) 'Shioo','Olagwa' FCFH/014	Stem – infusion	Convulsion
Sesbaniasesban(Linn, Merril) 'Agaechamegh'	Leaves – grinded with salt	Stomach ache
Borroriaverticillata(Herper) syn. B. Octodon. (Rubiaceae) 'Gogomatsu' FCFH/009	Leaves- rubbing on the affected parts	Eczema
Nauclealatojilia(SM) (Rubiaceae) 'Bakure', 'Ikyura ukase', FCFH/031	Fruits – grinded and eaten	Barrenness
Citrus aurantifolia(Christm) (Rubiaceae) 'Lemu' FCFH/002	Leaves/branches – decoction	Fevers
Butyrospernumparkii(G.Don) (Sapotaceae) 'Kadanya', 'Emi-emi'FCFH/050	Stem bark – decoction	Dysentery
Schwenkiaamericana(Linn) (Solanaceae) 'Gaurishoki', Chiese' FCFH/017	Roots/leaves – decoction	Worm expellant
Daturastramonium(L) (Solanaceae) 'Zakkami' FCFH/033	Flowers/leaves	Eye diseases
Sterculiasetigera(Det) (Sterculiaceae) 'Kukuki', 'Kumendugh' FCFH/011	Bark – infusion	Dysentery
Gwerwiamollis(Juss) (Tiliaceae),'Hueza' FCFH/043	Leaves – grinded and applied topically	Whitlow
Gmelinaarborea(Roxb) (Verbenaceae), 'Malina' FCFH/050	Fruit – juice	Ring worm
Eucalyptus camaldulensis(L) (Myrtaceae) 'Zaiti' FCFH/010	Leaves – decoction	Hemorrhoids
Tridaxprocumbens(L) (Compositae) 'Ichanikyoondo' FCFH/048	The whole plants except roots – squeezed	Fresh wounds
Balantiesaegyptica(L) Del. (Zygophyllaceae) 'Aduwa' FCFH/022	Leaves – decoction	constipation

TABLE 3: RESPONSE FROM PEOPLE INTERVIEWED

Village	No. of Headers	No. of Users	Effectiveness of Herbs*
Chanchanji	4	10	10
Peva	10	20	18
Sabe	3	6	6
Demavaa	5	15	14
Adu	2	8	7
Shinku	3	10	10
Tyoalumun	2	4	4
Amadu	5	15	14
TOTAL	35	88	83

*No. of users who affirmed the efficacy of herbs.

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