**Student name: Aniama Salome Ojone**

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**Tutor : Liliana Penaranda**

**Introduction**

Plants are of great importance in the environment this is because plants are sources of easily accessible bioactive compounds and man depends on those plants in their surroundings for food, medical, shelter and other domestic uses and they are found everywhere in our environment especially in the tropics where Nigeria belongs. One of the vital applications of indigenous knowledge systems and practices of plants is in the human and animal health care as people have collected medicinal plants to treat various ailments since ancient times. In developing countries, traditional plant based system of medicine is often the only accessible and affordable. Herbal therapy has come of age and today, medicinal plants play a significant role in human health care globally, frequently quoted estimate indicates that 75% to 80% of the population of the world depends on medicinal plants for their health (Abo *et al.,* 2008). Infact World health organization (WHO) in 2008 disclosed that as many as 80% of the world’s people depend on traditional medicine for their primary health care needs (Leila, Ghassen, and Hamide, 2011). The medicinal plants used by various ethno-linguistic groups have attracted much interest from scientists and the general public alike. Today millions of people still use plants as sources of medicine or drugs, this have made important contribution to the welfare and quality of life especially in tropics and sub-tropics (Sofowora, 2008). Medicinal plants are now being given serious global attention. Nigerian society is known to trust and believe in treating diseases with leaves, bark, roots, fruits and even flowers of plants. Within the traditional society herbal medicine has long been recognized as one of the oldest forms of remedies for diseases and ailment used by humans and many people still rely on traditional preventive and or healing practices of medicinal plants for their daily healthcare needs. It is noted that in Nigeria plants serve dual purposes (food and medicine), while their grains, fruits, tubers serve as food, their roots, barks and leaves serve as medicine, a number of wild medicinal and other aromatic plants are highly valuable and a significant proportion of the people consume them for medicinal purposes [Plotkin, 1993]. In spite of the advancement in modern medicine there is abundant undocumented traditional knowledge of herbal remedies used to treat diseases in most cultures designed for either therapeutic or prophylactic use in human or animal diseases (Offiah et al, 2012). Indigenous healers and traditional healthcare practitioners throughout the world have developed rich stores of knowledge about how to collect and use medicinal plants when providing services to communities (Xiong et al. 2020). The painful thing is that this vital part of human existence is being threatened therefore threatening the life of man and every other life inhabiting our planet. Throughout the tropics species are disappearing, but the knowledge of how to use those species is disappearing at an even faster rate. Indigenous knowledge is extremely important to humanity. Native people can tell much about their local plants in the area of ethno – medicinal and cultural uses; for instance whether they are poisonous, useful for curing purposes, good for roofing material, or good fuels. They also know how to prepare the plant for these uses, when and how to harvest it and which parts, and also when and where it grows. This invaluable knowledge is being lost by the destruction of these natural ecosystems, the acculturation (civilization) and anthropogenic activities of these people (Weston, 1994).

Apart from treating diseases, medicinal plants are now being increasingly used in cosmetics, foods and teas. The growing interest in herbs is based on the belief that the plants have a vast potential for use as curative medicine. Today, these natural resources are being depleted and traditional management systems are breaking down

In Nigeria, all species and varieties of plants provide the principal natural and capital stock from which rural livelihood is constructed. In order to communicate this information to this generation and the next generation, it is essential to document traditional uses of our plant diversity especially those found in our immediate environment, before these resources are permanently destroyed. It is also good to note that every transformation starts with understanding the fundamental of any idea to make a successful ending.

Proper identification, utilization and conservation of medicinal plants can assist in providing better alternative healthcare services in rural areas especially in the developing countries. The scarcity of better health care systems that provide better healthcare services, ensuring healthy lives and promoting well being of the people at all ages (SDG 3) in the developing countries underpins the importance of ethno-medicinal plants (Sofowora, 2013; Karunamoorthi *et al.*, 2013).

**Some categories of health disorder traditionally treated in Nigeria using herbal medicine include:**

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| **Health disorder** | **Herbal medicine** |
| Poor sexual libido (Aphrodisiac)  | *Acacia seyal, Fadogia eggrastis, Perquentina nigriscens, Gomphrena celosioides, Zanthoxylum leprieurii* |
| Fibroid  | *Kigelia africana,* *Dialium guinensis* |
| Hernia  | *Anthocleista djalonensis, Senna alata, Jatropha curcas, Lonchocarpus cyanescens, Rauwolfia vomitoria* |
| Prolonged labour | *Annona senegalensis, Aspillia africana*  |
| Infertility in men | *Fadogia eggrastis, Elytaria marginata, Ochna afzeli, Garcinia kola, Gossypium hirsutum, Khaya senegalensis, Euadenia eminens* |
| Infertility in women | *Lophira lanceolata, Alstonia boonei, Fadogia eggrastis, Perquentina nigriscens, Elytaria marginata, Gossypium hirsutum, Discoglypremna caloneura* |
| Miscarriage  | *Entada abyssinica, Drypetes floribunda, Gardenia florida,* *Entada africana, Malacantha alnifolia* |
| Stomach ache/Abdominal pain | *Paullinia pinnata, Tridax procumbens,*  *Entada abyssinica, Khaya senegalensis, Momordica charantia, Hannoa undulate, Alcchornia cordifolia* |
| Gastro - enteritis  | *Bridelia ferruginea, Anacardium occidentalis, Chassilia kolly, Desmodium velutinum, Dissottis erecta* |
| Gastro intestinal problem | *Euphorbia hirta* |
| Diarrhoea and Dysentery | *Aeollanthus pubescens, Pillostigma thonningii*, *Maranthes polyandra,* *Ageratum conyzoides,**Albizia ferruginea, Gladiolus quartinianus,* *Terminalia schimperiana, Khaya senegalensis, Blechum pyramidatum,* *Pterocarpus luecens, Burkea africana,* *Anacardium occidentalis, Adansonia digitata, Acacia seyal, Annona senegalensis, Crinum jagus, Guntenbergia nigriana, Psidium guajava,*  |
| Respiratory problems (Asthma, Bronchitis ),  | *Acacia seyal, Senna occidetalis, Entada abyssinica, Gossypium hirsutum,* *Euphorbia hirta* |
| Poor Oral hygiene | *Cnestis ferruginea* |
| Tooth decay and gum infection | *Acacia Senegal, Mentha arvensis, Newbouldia laevis* |
| Sore throat  | *Afromomum daniellii , Walteria indica* |
| Diabetes  | *Anthocleista djalonensis, Phragmanthera Incana*, *Vernonia amygdalina,* *Boerhavia diffusa, Momordica charantia, Senna occidetalis, Ocimum gratissimum, Magnifera indica, Sphenocentrium jollyanum, Bombax buonopozense* |
| Cough and cold  | *Dialium guinensis, Parinari curatellaefolium,* *Entada abyssinica,* *Ageratum conyzoides,**Spondias mombin, Nicotiana tabbacum, Senna occidetalis,* *Cymbopogon citrutus, Acanthospermum hispidum, Abrus precatorius, Garcinia kola, Burkea africana, Annona senegalensis,* *Anacardium occidentalis, Ficus exasperate, Afromomum melegueta, Dennettia tripetala, Bryophyllum pinnatum* |
| Blood boosters, Anaemia, Sickle cell anaemia | *Senna occidetalis, Diodia scandens, Musa sp, Ficus carpensis, Moringa oliefera, Solanum melongena* |
| Rashes/ itching skin  | *Nauclea latifolia,* *Ageratum conyzoides, Gomphrena celosioides,**Acanthospermum hispidum, Byrsocarpus coccineus, Rauwolfia vomitoria, Carica papaya, Calotropis procera, Desmodium salicifolium, Solanum nigrum* |
| Measles  | *Maranthes polyandra, Phyllanthus amarus* |
| Eczema  | *Mitracarpum scabrum, Senna alata* |
| Ring worm | *Jatropha curcas,* *Senna alata* |
| Intestinal worms | *Senna occidetalis* |
| Urinary tract infections (schistosomiasis)  | *Senna alata, Senna occidetalis* |
| Eye infection,  | *Boerhavia diffusa, Senna occidetalis, Entada abyssinica, Bidens pilosa,* *Moringa oliefera* |
| Ear infection, | *Lawsonia inermis, Solanum tovrum, Bidens pilosa* |
| Pneumonia | *Striga hermonthica, Ageratum conyzoides. Bidens pilosa* |
| Convulsion,  | *Vitellaria paradoxum, Senna alata, Terminalia superba, Elaeis guineensis, Ixora hutea, Tridax procumbens, Heliotropium indicum,* |
| Menstrual pain | *Allophyllus africanus, Pteridium esculentum, Senna alata, Senna occidetalis, Imperata cylindrical, Gomphrena celosioides* |
| General pain (Analgesic) | *Xylopia aethipica, Boerhavia diffusa, Senna occidetalis, Cnestis ferruginea* |
| Head ache/ Migraine  | *Senna alata, Desmodium mauritianum, Pergularia daemia, Ageratum conyzoides* |
| Increase urine production (Diuretic) | *Senna occidetalis, Chamaecrita mimosoides* |
| Inflammation  | *Acacia seyal, Boerhavia diffusa, Senna occidetalis, Cnestis ferruginea, Hibiscus sabdariffa* |
| Rheumatism, Arthritis and aches,  | *Acacia seyal, Senna occidetalis, Berlinia* sp, *Maranthes robusta,* .*Ageratum conyzoides* |
| Malaria Fever / high temperature,  | *Azadirachta indica, Protea madiensis,* *Entada abyssinica, Khaya senegalensis, Blechum pyramidatum,* *Hymenocardia acida,* *Senna occidetalis,* *Vitellaria paradoxum, Eupatorium odoratum, Adansonia digitata, Amaranthus spinosus, Acanthospermum hispidum, Pteridium esculentum, Magnifera indica, Cymbopogon citrutus, Ageratum conyzoides, Garcinia cola, Acacia senegalensis, Berlinia* sp. |
| Hepatitis B, Jaundice, yellow fever,  | *Striga hermonthica, Acanthospermum hispidum, Boerhavia diffusa, Senna alata, Daniellia oliveri, Morinda lucida, Bidens pilosa, Garcinia cola, Moringa oleifera* |
| Typhoid  | *Senna occidetalis, Phyllanthus amarus, Cyperus esculentus, Gossypium hirsutum, Magnifera indica, Garcinia cola* |
| Tuberculosis, | *Senna occidetalis* |
| Gonorrhoea, syphilis | *Imperata cylindrical*, *Elytaria marginata,**Ocimum gratissimum, Pillostigma thonningii,* *Aspillia africana,* *Terminalia catapa,* *Capsicum annum, Garcinia kola, Gladiolus quartinianus, Amaranthus spinosus, Senna alata,**Senna occidetalis,Ficus thonningii, Paullinia pinnata,* |
| Laxative or purgatives,  | *Amaranthus hybridus, Talium triangularis, Hannoa undulata,*  *Carica papaya, Alcchornia cordifolia, Senna occidetalis* |
| Constipation  | *Senna occidetalis, Citrus sinensis, abelmuscus esculentum,* |
| Stimulants,  | *Afromomum melegueta, Cola nitida, Dennettia tripetala,* |
| Snake bite, Scorpion stings  | *Acanthospermum hispidum, Entada abyssinica, Vitex doniana,* *Asparagus africanus, Digitaria horizontalis, Blechum pyramidatum,* *Momordica charantia, Proscopis africana, Jatropha curcas, Amaranthus spinosus* |
| Ingested poison | *Erythrophleum ivorense, Annona senegalensis, Proscopis africana, Burkea africana, Elaeis guineensis, Uveria chamae* |
| Liver problem | *Senna occidetalis, Hibiscus sabdariffa* |
| Wounds, cuts, and boils  | *Eupatorium odoratum, Sida acuta,* *Dracaena mannii, Aspilla africana,* *Ageratum conyzoides, Bidens pilosa,**Amaranthus spinosus,**Thyme vulgaris, Kigelia africana,* *Senna occidetalis* |
| Cancers | *Ampelocissus indica, Pillostigma thonningii*, *Calotropis procera, Boerhavia diffusa, Senna alata, Phragmanthera Incana, Physalis angulata* |
| Ulcers,  | *Haemanthus multiflorus,* *Amaranthus spinosus, Burkea africana, Lecaniodiscus cupanioides* |
| Whitlow  | *Sida acuta, Amaranthus spinosus,*  *Burkea africana* |
| Vomiting  | *Acanthospermum hispidum, Blechum pyramidatum, Dialium guinensis* |
| High blood pressure (Hypertension),  | *Hibiscus sabdariffa, Vernonia amygdalina, Parkia biglobosa, Tridax procumbens* |
| Stroke  | *Paullinia pinnata, Drypetes aubrevillei, Discoglypremna caloneura, Zanthoxylum leprieurii, Uapaca guineensis, Bombax buonopozense, Elaeis guineensis* |
| Fractured/broken bone | *Amaranthus spinosus, Paullinia pinnata, Ipomea pes-caprae, Tapinanthus dodoneifolius, Phragmanthera capitata* |
| Kwashiorkor | *Desmodium salicifolium* |
| Leprosy  | *Striga hermonthica, Senna occidetalis* |
| Hiccup  | *Hannoa undulata* |
| Epilepsy | *Acanthospermum hispidum, Burkea africana* |
| Stop bleeding | *Acacia seyal, Aningeria altissima* |
| Candidiasis  | *Alcchornia cordifolia* |
| Insomnia | *Vernonia amygdalina* |

**Challenges**

The way people harvest plants from the wild are generally invasive and destructive to medicinal plants in their natural habitat which may pose serious threat to these important plants and if kept unchecked sometimes may lead to extinction of some of the important species. In fact some of the plants are termed weeds among people in Nigeria. According to the World Wildlife Fund and International Union for Conservation of Nature, about 50,000 to 80,000 species of flowering plants are currently being used for medicinal purposes worldwide (Miththapala, 2006). Nearly 15,000 of them are threatened with extinction because of excessive exploitation and habitat destruction (Bentley, 2010).

Preservation and maintenance culture is very poor as many people harvest more than they would need at a particular time, instead of preserving the unused ones, it is thrown away thinking that they always go back to the wild to harvest when next they need it.

No specific dosage for medicine made from the plants especially the ingested ones as the patient is asked to keep drinking until he/she is heal of that ailment

There are signs that some of the plant-based remedies offered by the healers may not necessarily have proven medicinal property for that particular ailment, but treatment is, more often than not, symptomatic. Too many plants are combined for the treatment of various diseases and or a particular plant can be used for the treatment and management of up four, five or even more diseases. This makes it seem more of trial and error.

The main custodians (the elderly people) of this knowledge hoard the information, and many are dying without transferring this knowledge, some of them will even give half hazard information on the utilization, preparation and conservation of these plants.

The hygiene of the environments and utensils used in the preparation of these medicines are questionable and there is a saying that cleanliness is next to godliness, sometimes the unhygienic nature would cause more harm than good.

**Conclusion**

In Nigeria, there is growing interest in herbs based on the belief that the plants have a vast potential for use as curative medicine and people in their local society can tell much about their local plants in the area of ethno – medicine, for instance whether they are poisonous, useful for curing purposes. They also know how to prepare the plant for these uses, when and how to harvest it and which parts, and also when and where it grows. This invaluable knowledge is being lost by the destruction of these natural ecosystems, the acculturation (civilization) and anthropogenic activities of these people. The younger generation has little knowledge about the ethno – medicinal uses of plants in the area because most of the knowledgeable, older persons are fast passing away and the younger ones are not as informed of this ethno – medicinal and cultural uses of plants around them.

**Recommendations**

Although, some empirical knowledge of medicinal plants among the various tribes continues to be developed and transmitted orally from one generation to the next, this mode of knowledge transmission is not enough as such proper documentation of this knowledge will help the younger and future generation keep the useful aspect of their tradition which is helpful to their life (Aniama, Usman and Ayodele, 2016).

There is need to inculcate the study of ethno-medicine into school curriculum as this would help emphasize the medicinal uses of some plants that may have been seen as useless or weeds, better mode of preparation of the plants for their medicinal purposes, the active ingredients of various plants so that they could be used for the right purposes or to avoid misuse of various plants.

People should be educated on the importance of plants around them and how to manage them in area of cultivation, usage and preservation to avoid over exploitation which may lead to extinction of these useful plants in the area.

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