

A SURVEY OF SOME MEDICINAL PLANTS AND THEIR USES IN UGHELLI-SOUTH LOCAL GOVERNMENT AREA OF DELTA STATE, NIGERIA.

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ABSTRACT

Medicinal plants, since times immemorial, have been used in virtually all cultures as a source of medicine, hence a survey of some medicinal plants and their uses was carried out in seven districts of Ughelli – South local government area in Delta state, Nigeria, from the month of March 2011 to July 2011. Questionnaires were administered and useful information about eighteen common medicinal plants were extracted from the inhabitants. The information obtained includes common names, botanical names, family names, plant part used for medicine, preparation and use of individual medicinal plants. The major category of persons involved in the use of medicinal plants was also identified from the biodata frequency of the respondents to the questionnaire and they include the aged, married, unemployed men and women with secondary education or no education at all.

Keywords : *Medicinal plant, Biodata frequency, Botanical names, Family names.*

INTRODUCTION

Plants form forest which constitute a vast genetic resource of enormous importance to future medical development (Jackson and Jackson, 1996). A large proportion of the medicines now in use, for example were developed from tropical plants (Meyers, 1991; Anon, 2003a) The World Health Organisation (WHO) defines a medicinal plant as 'any plant, which, in one or more of its organs, contains substances that can be used for therapeutic purposes, or which are precursors for chemo pharmaceutical semi synthesis'. This definition distinguishes those plants that are already scientifically tested from those not subjected to a scientific study but are used in the traditional systems of medicine.

Most cultures have a tradition of using plants medicinally. For example, bitter leaf (*Vernonia amygdalina*) is used by both primates and indigenous people in Africa to treat intestinal ailments such as dysentery (Huffman and Seifu, 1989) Purple coneflower (*Echinacea purpurea*) and other species of *Echinacea* has been used for at least 400 years by Native Americans to treat infections and wounds, and as a general "cure-all". It is currently used for symptoms associated with cold and flu (Roxas and Jurenka, 2007). Arnica (*Arnica montana*) is used as an anti-inflammatory (Braga *et al.*, 2006) and for osteoarthritis (Widrig *et al.*, 2007). Bitter gourd (*Momordica charantia*) is used as an agent to reduce the blood glucose level (Baldwa *et al.*, 1977). Blueberries (*Vaccinium spp*) are of current medical interest as an antioxidant (Prior *et al.*, 1998; Smith *et al.*, 2000) and for urinary tract ailments (Howell *et al.*, 1998). Chili (*Capsicum frutescens*)'s active ingredient, capsaicine, is the basic of commercial pain-relief ointments in Western medicine. The low incidence of heart attack in Thais has been shown to be related to capsaicine's fibronolytic action (dissolving blood clots) (Sukon *et al.*, 1982). Garlic (*Allium sativum*) is widely used as an antibiotic (Cai *et al.*, 2007).

The beneficial effects of the medicinal plants in health care can be well judged from the World Health Organization estimate that around 80% of the world population uses them in some form or the other. The people using them are mostly those living in the remote or marginal areas and rural and indigenous people who depend heavily on the natural resources of their surrounding environment for their health care needs. These people, over the centuries have developed a wealth of knowledge about the ecology, botany and uses of the diverse medicinal flora of their region. This has given rise to the thriving traditional systems of medicine in Ughelli-South local government area of Delta state.

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It is the objective of this study to investigate the use of medicinal plants in curing various ailments and diseases in Ughelli-South local government area of Delta state.

MATERIALS AND METHODS

The study area

Ughelli-South Local government area consist of seven districts, namely Ughenwin, Olomu, Okparabe, Avwren, Otughereme, Effun-otor and Ewu, with Otughereme being the headquarter. The inhabitants of the area are urhobo and predominantly farmers and traders.

Field trips and questionnaire administration

Field trips were made to the study area to extract information from the inhabitants on some medicinal plants used commonly in the area. Questionnaires were administered from the months of March – July, 2011. The respondents were purposely sampled for the study due to the fact that they have knowledge of the relevance of plants as a result of their occupation. The information required of all the respondents include: sex, age, educational background, place of origin, marital status, years of experience in business and the names of plant species preferred for treating various ailments.

Consequently, some plant specimens were collected fresh from the seven districts in the local government area. These plant specimens were pressed and dried. The local names of the various plant species commonly found in these areas were obtained in Urhobo and the botanical names were verified from an indigene of the local government area who is a staff of the Department of plant Biology and Biotechnology, University of Benin.

Determination of frequency of medicinal plant use.

Frequency of use of medicinal plant in the study area was determined as a percentage of the number of respondents using a medicinal plant species in relation to the total respondents that use the medicinal plant.

RESULT AND DISCUSSION

The people of Ughelli – South local government area are not left out of the use of medicinal plants for preventing and curing various ailments and disease (Table 2 and Table 3). This result is in agreement with the observation of UNESCO (1996) which states that the use of medicinal plants in most developing countries as a normative basis for the maintenance of good health has been widely observed. Males, married men and women, illiterates, aged men and women (50 and above), indigenes and unemployed are respondents that are responsible for the highest medicinal plant use (Table 1). It is clearly seen that the aged, married, unemployed men and women with secondary education or no education at all are the major actors in the use of medicinal plants (Table 1).

Table 1: Biodata Frequency of the Respondents to the Questionnaires.

Respondents		Frequency (%)
Gender	Male	60.80
	Female	39.20
Marital status	Single	38.91
	Married	61.09
Education level	Secondary	24.12
	Post secondary	22.81
	University	5.32
	No formal Education	47.75
Age	20-30	11.01
	31-40	16.21
	41-50	27.72
	51 and above	45.06
Employment	Employed	18.49
	Unemployed	81.51
Origin	Indigenes	60.24
	Non-indigenes	39.76

Table 2: List of some medicinal plants in Ughelli-South local government area of Delta state, Nigeria.

Plant species	Common names	Family names
<i>Chlorophora excelsa</i>	African teak	Moraceae
<i>Imperata cylindrical</i>	Spear grass	Poaceae
<i>Striga asiatica</i>	Witch weed	Orobanchaceae
<i>Aristea ecklonii</i>	Aristea	Iridaceae
<i>Alternanthera philoxeroides</i>	Alligator weed	Amaranthaceae
<i>Elaeis guineensis</i>	Oil palm	Arecaceae
<i>Musa paradisiaca</i>	Plantain	Musaceae
<i>Vernonia amygdalina</i>	Bitter leaf	Asteraceae
<i>Talinum triangulare</i>	Water leaf	Portulacaceae
<i>Mangifera indica</i>	Mango	Anacardiaceae
<i>Garcinia cola</i>	Bitter kola	Guttiferae
<i>Mannihot esculenta</i>	Cassava	Euphorbiaceae
<i>Citrus sinensis</i>	Orange	Rutaceae
<i>Phyllanthus amarus</i>	Phyllanthus	Phyllanthaceae
<i>Cymbopogon citrates</i>	Cymbopogon	Germinae
<i>Chromolaena odorata</i>	Siam weed	Asteraceae
<i>Telfaria occidentalis</i>	Fluted pumpkin	Cucurbitaceae
<i>Carica papaya</i>	Pawpaw	Caricaceae

Table 3: Uses of some medicinal plants in Ughelli – South local government area of Delta state, Nigeria.

Plant species/part used	Preparation	Uses
<i>Chlorophora excelsa</i> /root	Washed, Pounded and sun-dried	Tied around the leg to straighten bone
<i>Imperata cylindrical</i> /leaf	Pounded	Chewed to cure diarrhoea and to reduce the size of pregnancy.
<i>Striga asiatica</i> /leaf	Sundried and squeezed in water	Drank to regulate high blood pressure
<i>Aristea ecklonii</i> /leaf	Squeezed to obtain the liquid	Dropped into the eyes to reduce madness
<i>Alternanthera philoxeroides</i> /leaf	Boiled in water	Used to bathe for body pain relief
<i>Elaeis guineensis</i> /leaf	Washed and cooked	Eaten as anti-fertility drug
<i>Musa paradisiaca</i> /leaf	Squeezed into a sponge	For bathing babies to cure and prevent Jaundice
<i>Musa paradisiaca</i> /stem	Cut and squeeze out the liquid	Liquid used to stop bleeding after delivery
<i>Vernonia amygdalina</i> /leaf	Washed in water	Drank to stop stomach pain and cure diabetes
<i>Talinum triangulare</i> / leaf	Washed and cooked	Eaten to give blood, contain protein and vitamin.
<i>Mangifera indica</i> /leaf	Boiled in water	Drank / used to bathe to cure fever.
<i>Garcinia cola</i> /leaf	Pounded and added to alcohol	Drank to reduce stomach pain and urinary tract infection.
<i>Manihot esculenta</i> /leaf	Squeezed to obtain the liquid	Used as eye drop to clear the eyes.
<i>Citrus sinensis</i> /leaf	Washed in water	Drank as anti-fertility drug.
<i>Phyllanthus amarus</i> /whole plant	Added to ogogoro	Drank to cure stomach pain
<i>Cymbopogon citratus</i> /leaf	Boiled in water	Drank to cure catarrh and cough.
<i>Chromolaena odorata</i> /leaf	Squeezed to obtain the liquid	Used to stop bleeding of wound

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CONCLUSION

Medicinal plants are gaining global awareness owing to the fact that the herbal drugs are cost – effective, easily available and most importantly, with negligible side effects.

RECOMMENDATION

The use of medicinal plants for curing various ailments and diseases should be encouraged at all levels.

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